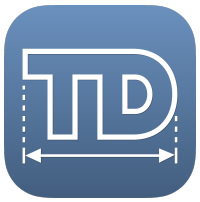


TouchDraw for iPad Floorplan Tutorial

Table of Contents

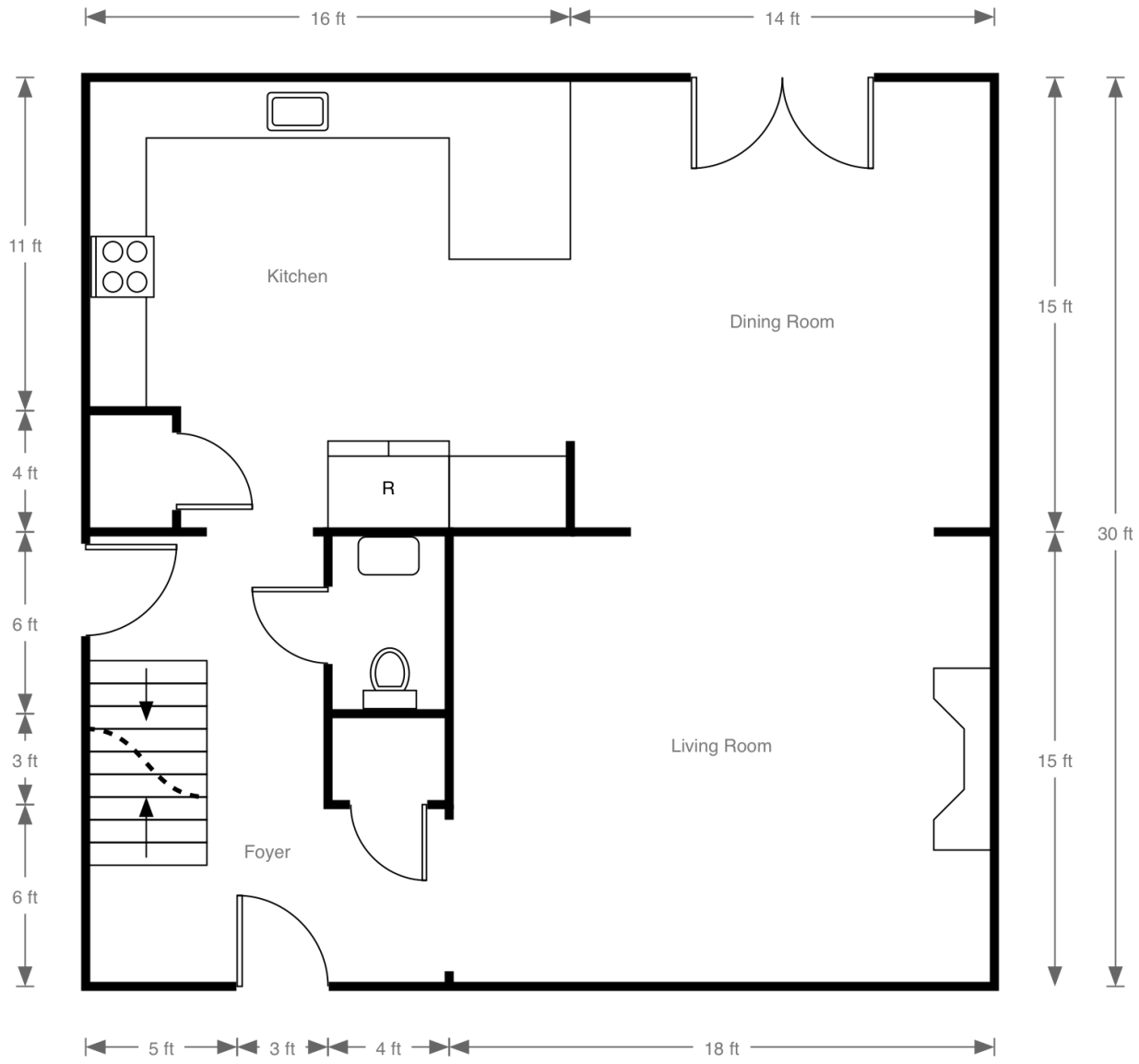
1. Introduction....3
2. Step 1 - Creating a New Drawing....5
3. Step 2 - Selecting the Units....6
4. Step 3 - Configure Dots Per Unit....9
5. Step 4 - Creating the Exterior Walls....12
6. Step 5 - Styling the Exterior Walls....18
7. Step 6 - Locking the Exterior Walls....21
8. Step 7 - Configuring the Layers....25
9. Step 8 - Creating the Interior Walls....32
10. Step 9 - Interior Wall Cleanup....50
11. Step 10 - Adding Door Cutouts Layer....55
12. Step 11 - Create Door Cutouts....58
13. Step 12 - Adding the Doors Layer....76
14. Step 13 - Adding the Doors....79
15. Step 14 - Adding the Fireplace Layer....95
16. Step 15 - Adding the Fireplace....96
17. Step 16 - Adding the Stairs Layer....105
18. Step 17 - Adding the Stairs....106
19. Step 18 - Adding the Bathroom Layer....118
20. Step 19 - Adding the Bathroom Fixtures....119
21. Step 20 - Adding the Kitchen Layer....125
22. Step 21 - Adding the Countertops....126
23. Step 22 - Adding the Appliances....131
24. Step 23 - Adding the Dimensions Layer....145
25. Step 24 - Adding the Dimension Lines....146
26. Step 25 - Adding Room Names Layer....149
27. Step 26 - Adding the Room Names....150

1. Introduction

Note: This tutorial is a living document and will be updated and edited based on user feedback and comments. If something isn't clear, or you have questions, don't hesitate to contact us and we'll work on updating it to answer your questions.

Overview

This tutorial is designed to walk you through the process of creating the following floor plan using TouchDraw for iPad.

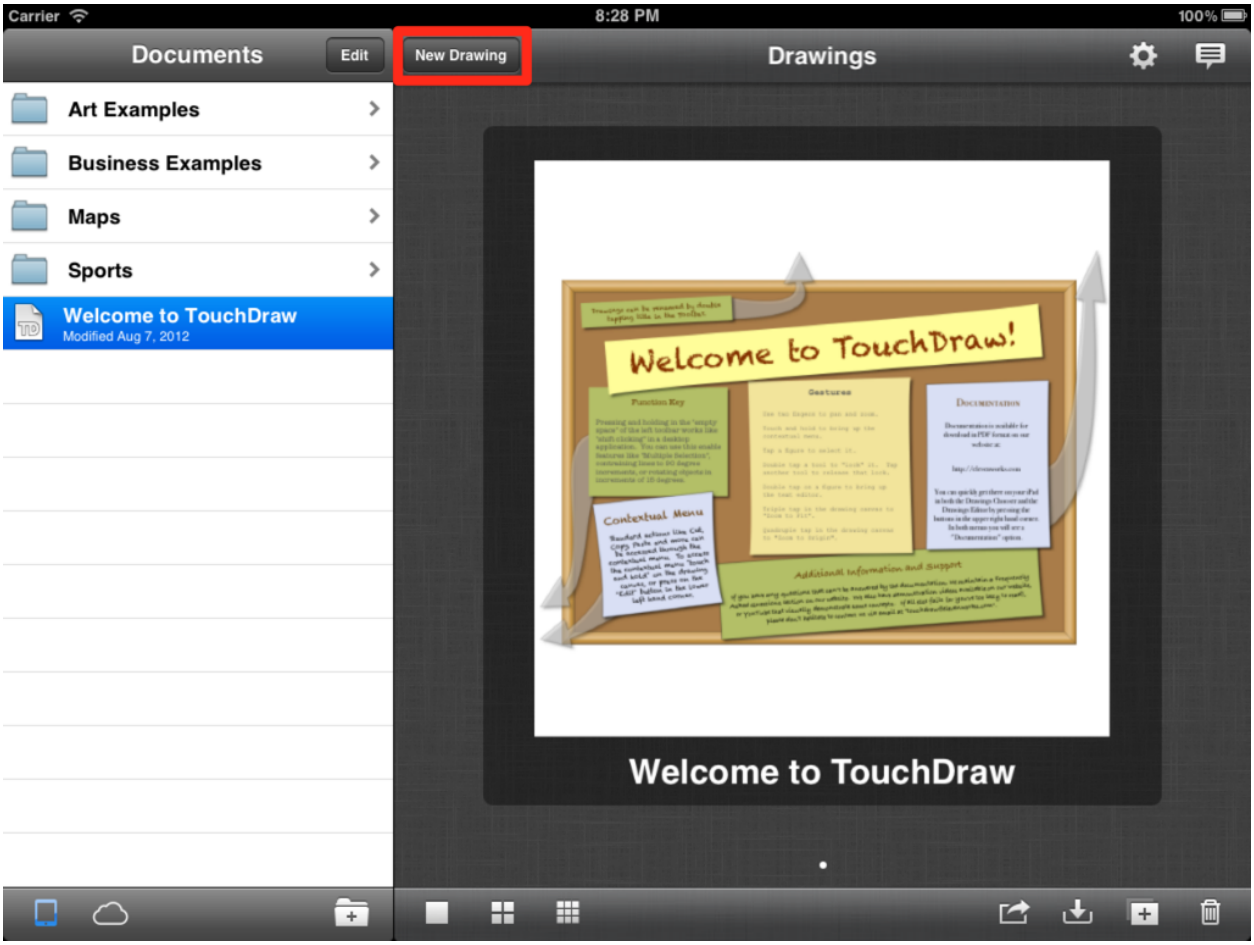


This tutorial was originally created using version 1.8.3 of TouchDraw. Depending on what version of TouchDraw you are using, there may be some minor differences between what the screenshots show and what is seen within the version of TouchDraw used for floor plan creation.

If you want to download the final file to see how it was constructed, you can download it here: floor_plan_example.t2d

2. Step 1 - Creating a New Drawing

The first step in this tutorial is to create a new drawing. To do this, press on the **New Drawing Button** in the Drawing Chooser:



Continue to Next Step

3. Step 2 - Selecting the Units

The second step is to configure the **Unit of Measure** for the drawing. Depending on where you live in the world, TouchDraw will create a new drawing in *Inches* or *Centimeters*. For this tutorial, we are going use *Feet* as the unit of measure; however all of the steps are equally applicable to other units of measure.

To configure the units of measure for the drawing, we need to first open the

Info Menu

. That can done by pressing the

Info

*

*

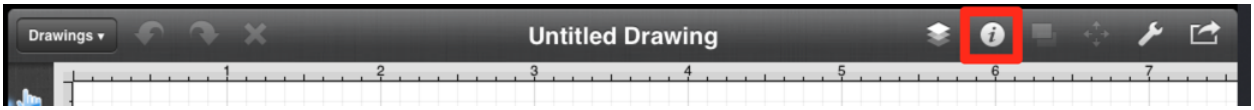
Button

*

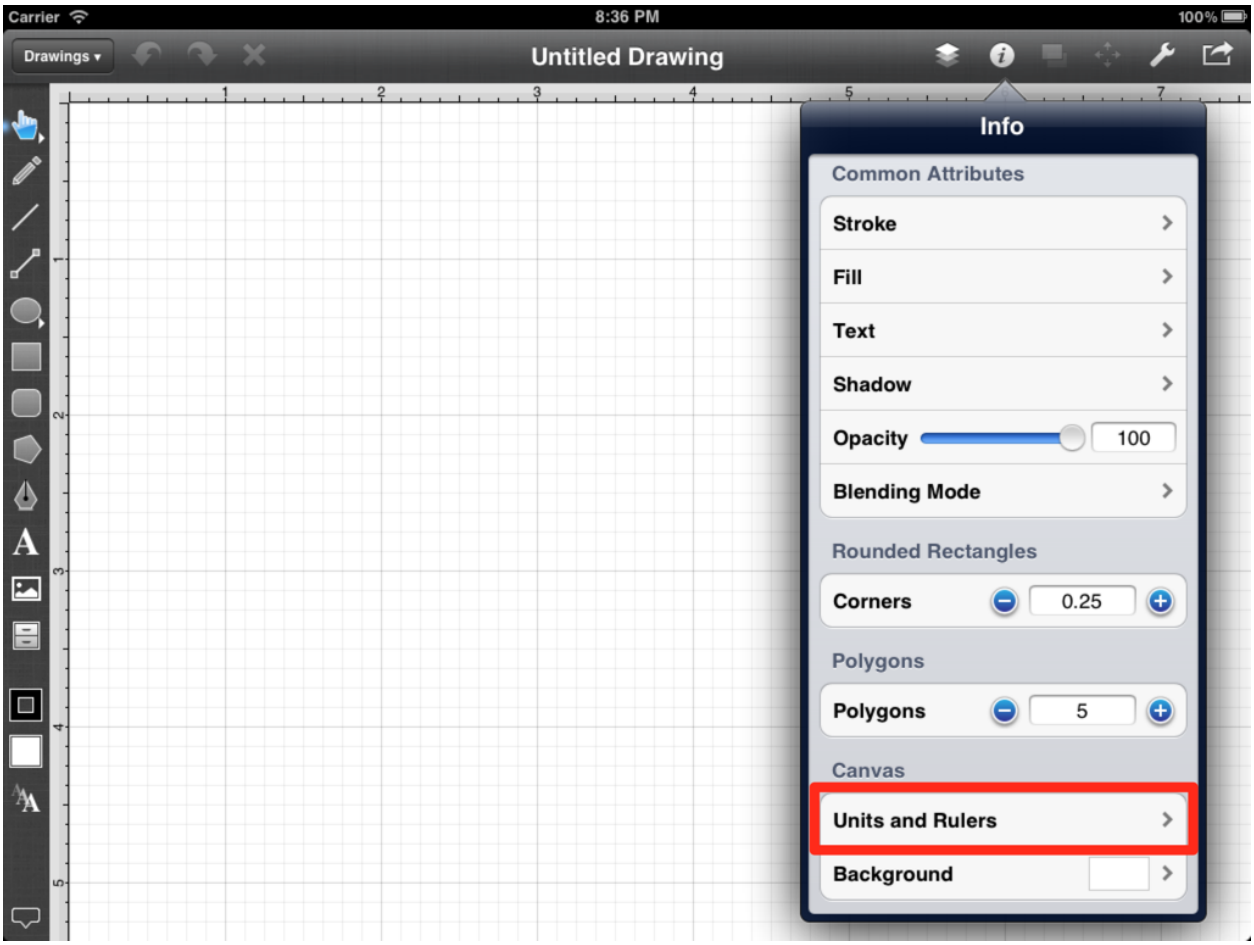
* in the

Top Toolbar

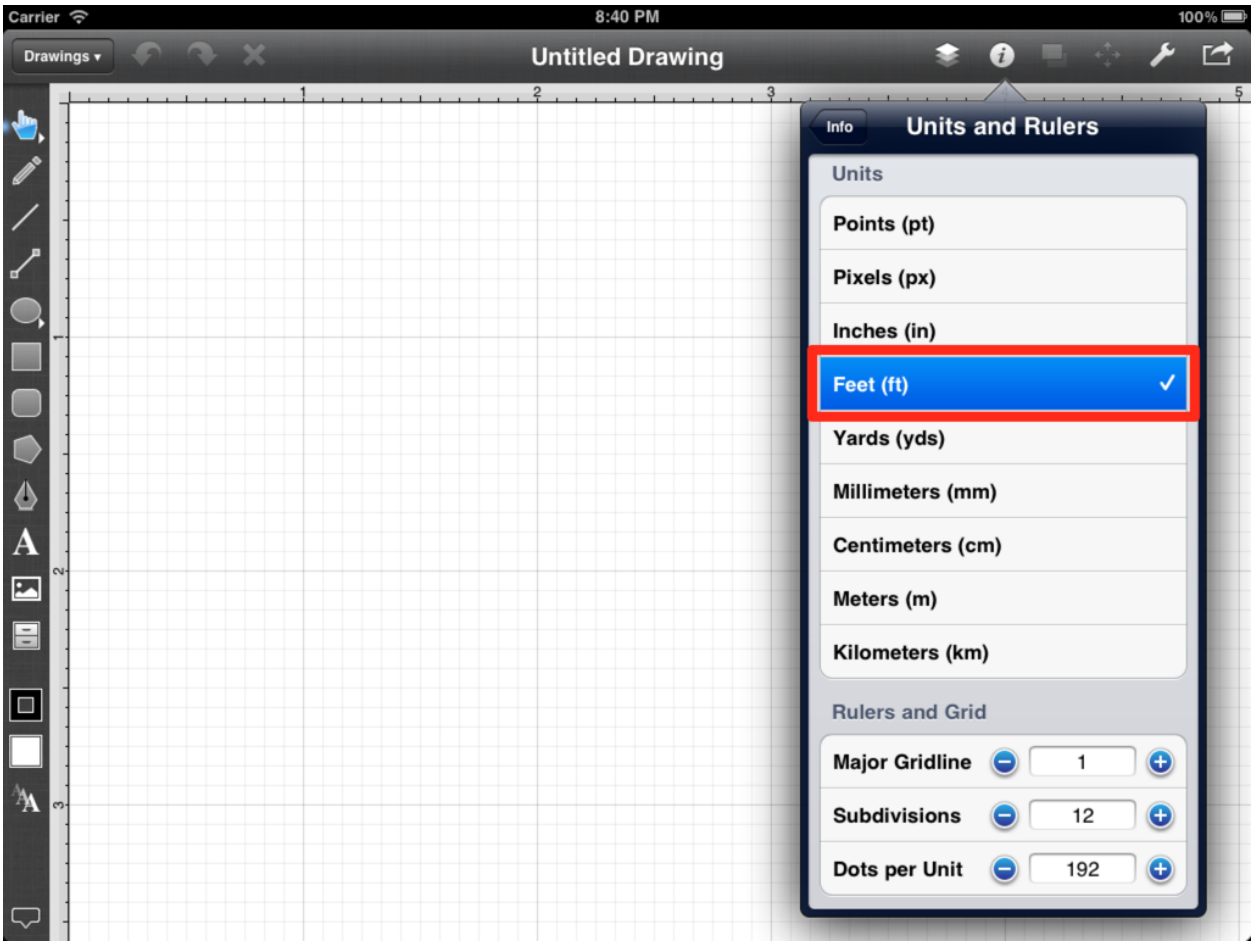
.



Once the **Info Menu** has been opened, select the **Units and Rulers** option.



Then select **Feet** from the provided list of options.

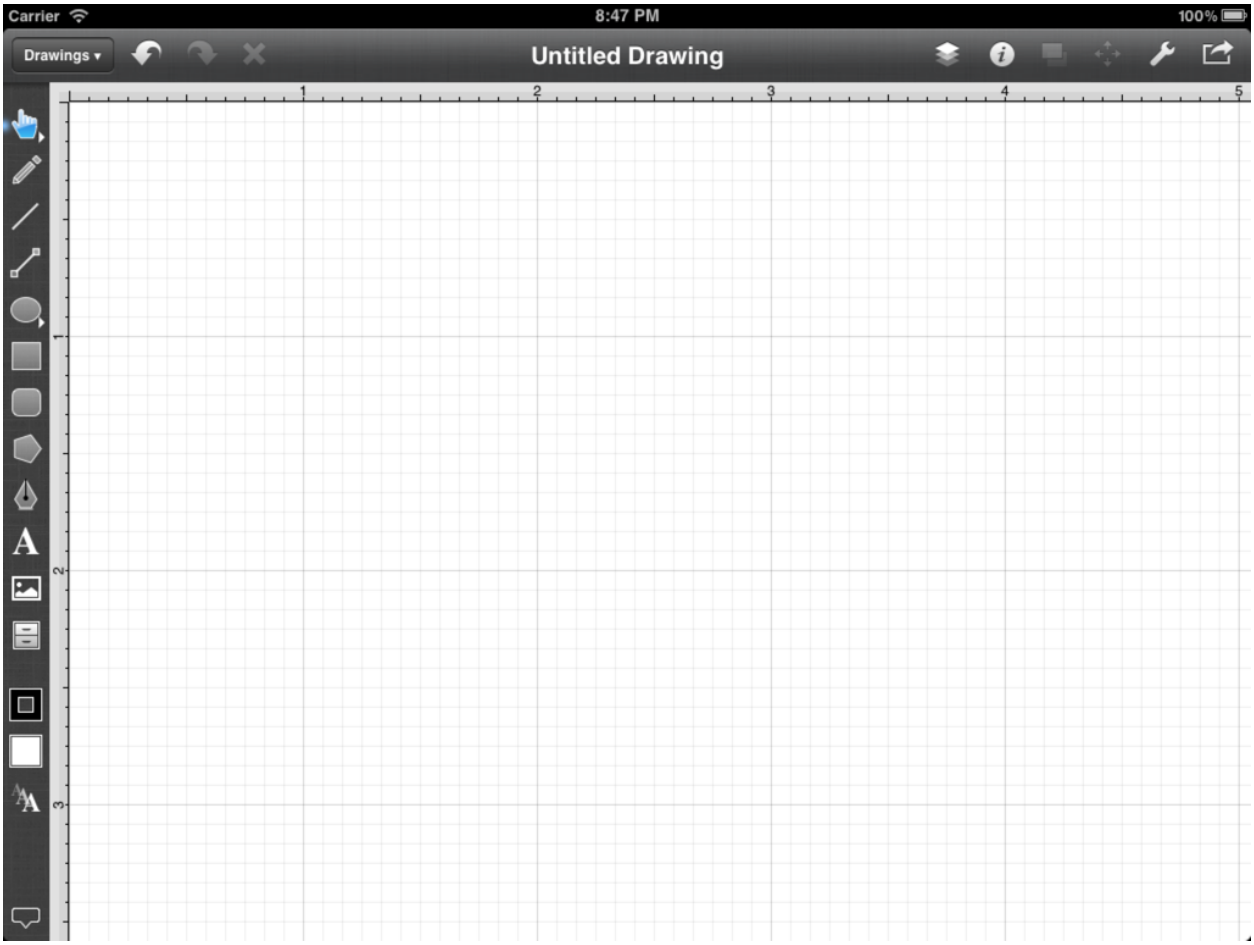


Once **Feet** has been selected as the unit of measurement, tap anywhere outside of the **Info Menu** (or on the **Info Menu button** in the Top Toolbar) to dismiss the menu.

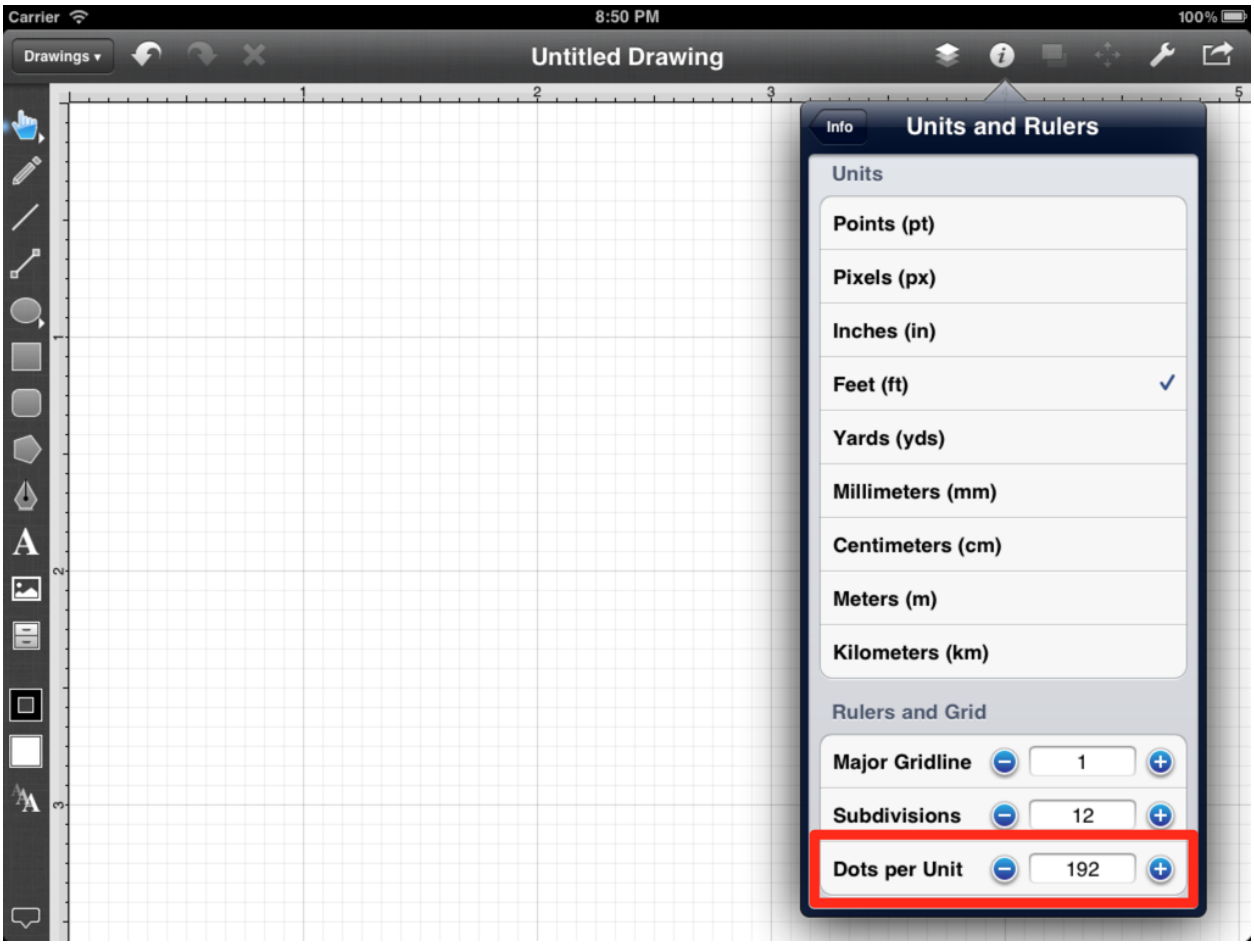
Continue to Next Step

4. Step 3 - Configure Dots Per Unit

After the **Unit of Measure** has been changed, the Drawing Canvas will have 12 subdivisions for each inch in feet rather than the orignal 8 subdivisions shown for inches. This is appropriate; however, at 100% zoom only (approximately) 5' x 3' are visible on the screen.



The scale of the drawing must be adjusted before beginning to draw the floor plan. In TouchDraw for iPad this is (currently) done through the **Dots Per Unit** option, which is accessed by opening the Info Menu and then selecting the **Units and Rulers** option as performed in the previous step. Tap on the **Info Button** again and TouchDraw will re-open the menu at the same place you were previously navigated to.



The **Dots per Unit** setting is highlighted in the above screenshot. Simple math is necessary to calculate the appropriate value for this setting.

First, the screen resolution of an iPad is 1024 x 768.

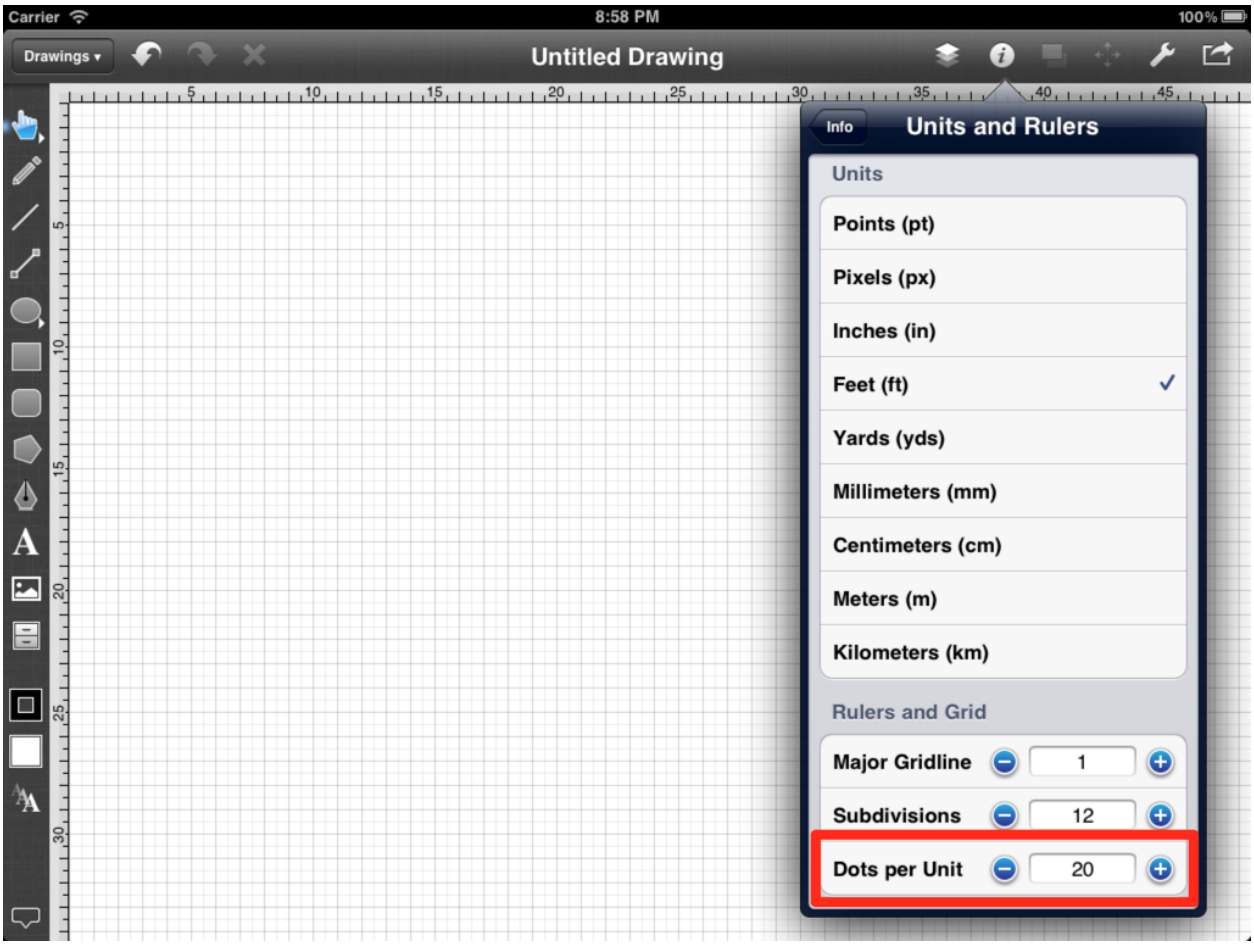
Second, the floor plan being drawn is 30' x 30'.

Third, taking into consideration that a little bit of a margin will be wanted on the side of the drawing, the drawing view should be approximately 50 feet wide.

Fourth, the appropriate **Dots per Unit** can be calculated by dividing 1024 (the number of horizontal pixels in the screen) by 50 (the width of the drawing in feet).

This calculation supplies a value of 20.48; however, we can simply round to the nearest integer and use 20 for

setting the **Dots Per Unit** .

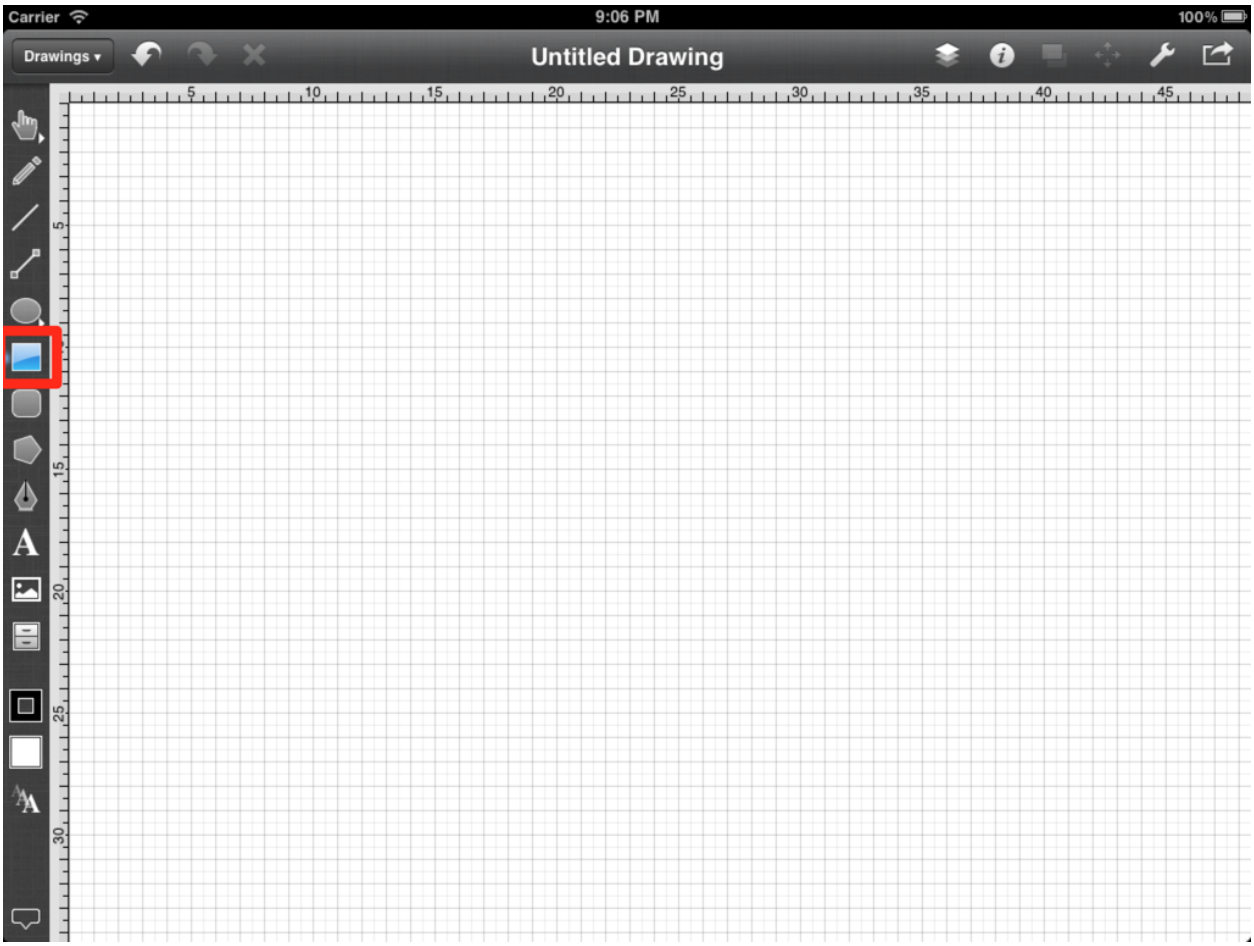


A future version of TouchDraw will perform the above calculation automatically by allowing the scale to be selected from a list.

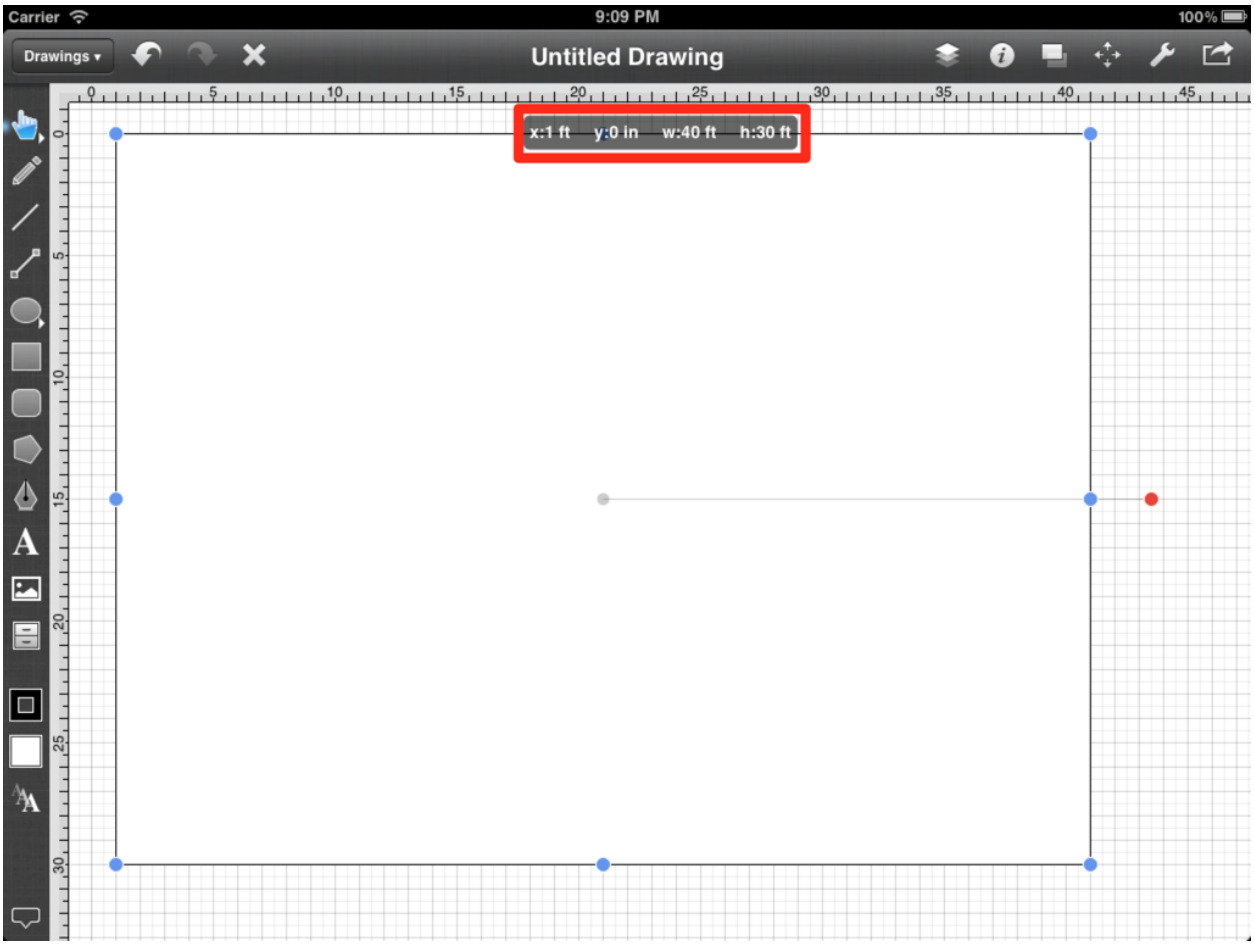
Continue to Next Step

5. Step 4 - Creating the Exterior Walls

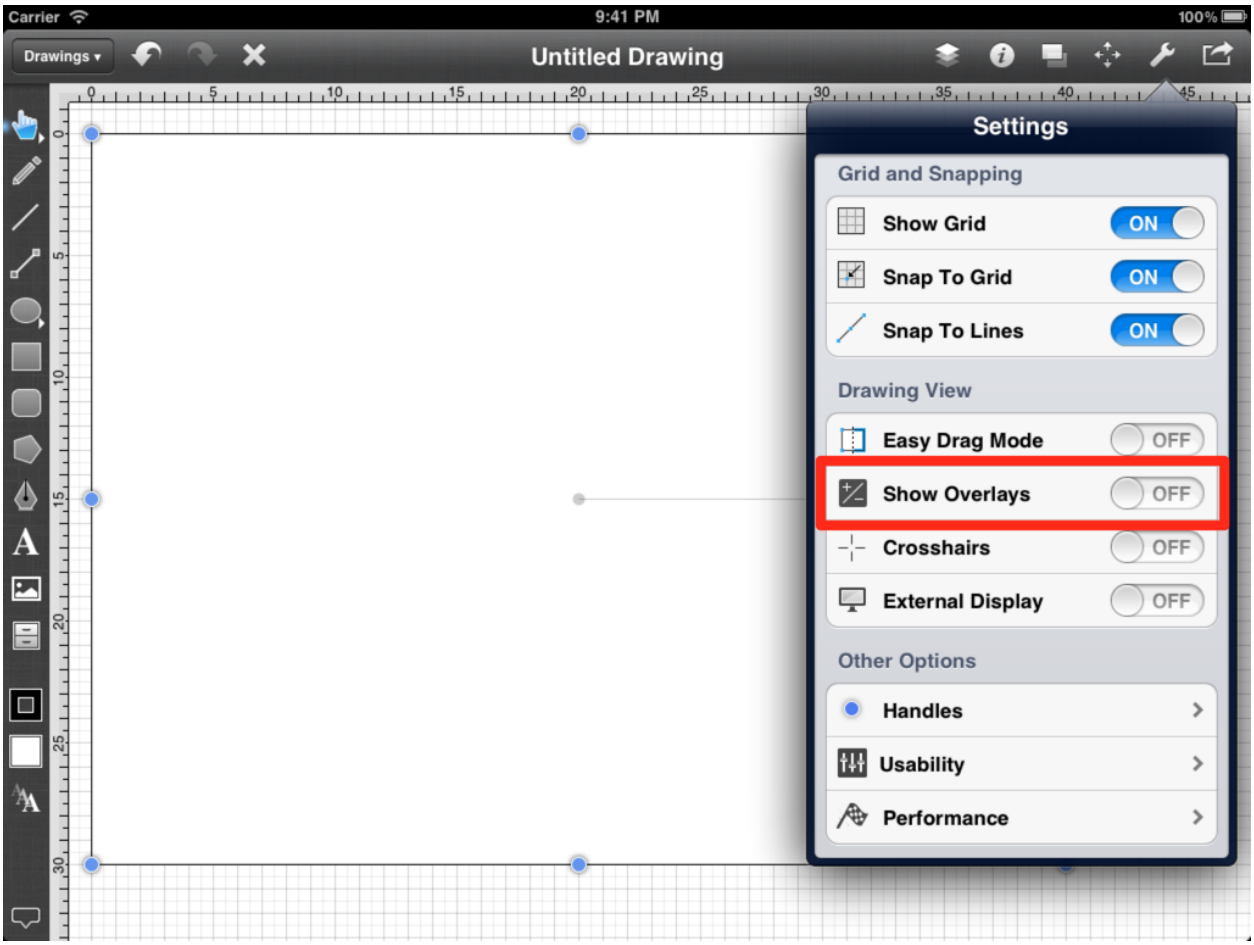
Start by creating a simple rectangle 30 feet wide by 30 feet deep for the exterior walls of the floor plan. This can be done by selecting the **Rectangle Tool** in the Drawing Toolbar on the left hand side of the screen.



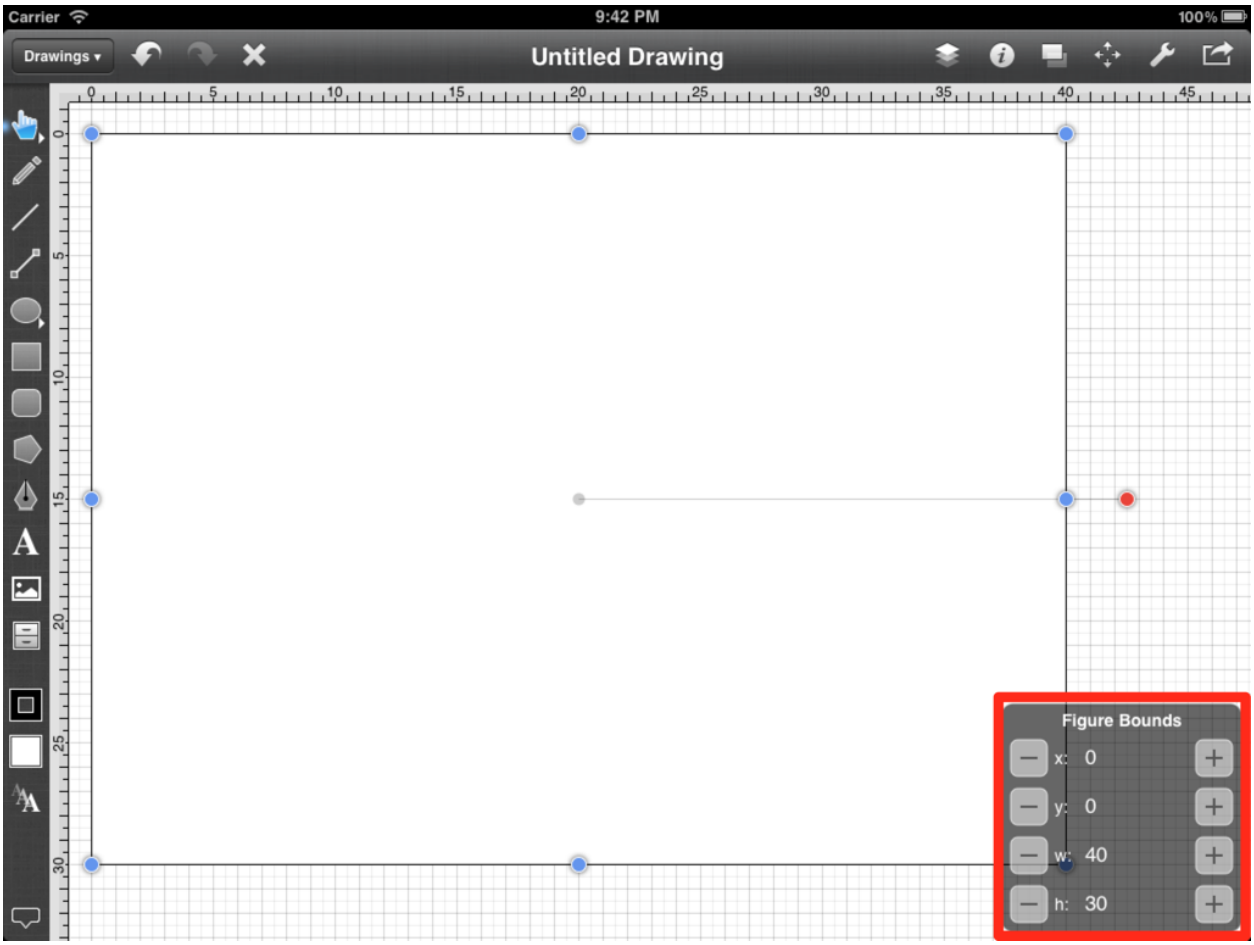
Tap and drag on the Drawing Canvas to create the rectangle. TouchDraw provides visual feedback by showing the size of the shape at the top of the drawing canvas as the rectangle is drawn.



If the rectangle is not exactly 30 ft x 30 ft on the first try, it is not a problem and one of many of the tools in TouchDraw can be used to resize the shape. In the screenshot above, the rectangle is drawn approximately 10 ft too wide. The Overlay Tool will be needed to modify the size of the rectangle. Use the Settings Menu to access the **Display Overlays**option.



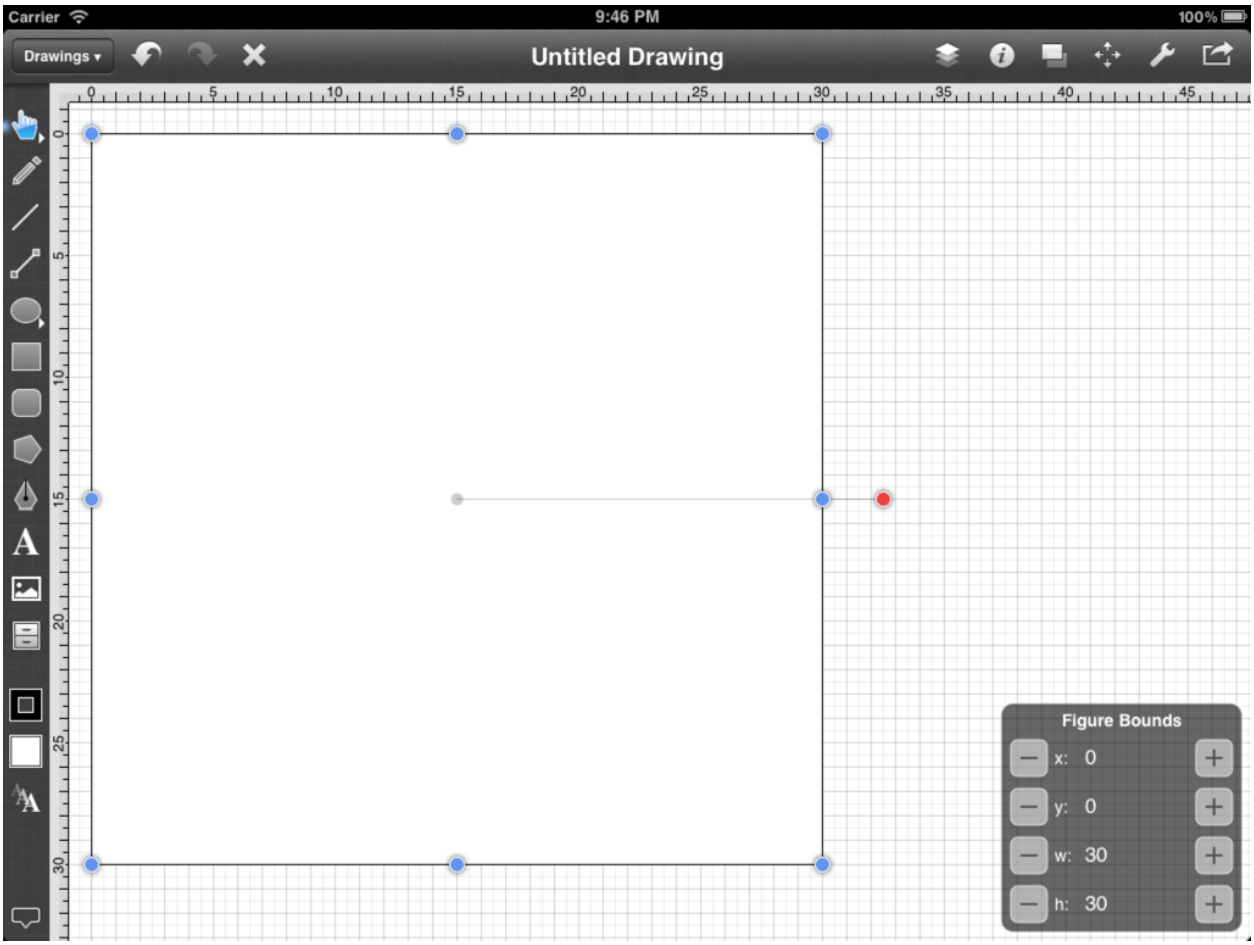
Tap on the **Overlay** option and the word **ON** will be shown as a visual indicator of the option being enabled. An Overlay Panel will appear on the drawing canvas that can be used to edit the size of the currently selected shape.



For a rectangle, an overlay is presented with 4 different values: x, y, w, h. **X** and **Y** represent the position of the upper left hand corner of the selected shape in the drawing canvas. **W** and **H** are the width and height of the shape in the currently selected unit of measure.

Either adjust the values by pressing on the **plus** and **minus** buttons or by tapping on the value, which will bring up the keyboard for editing the value directly.

The screen should appear as shown below after changing the width of the rectangle to 30:



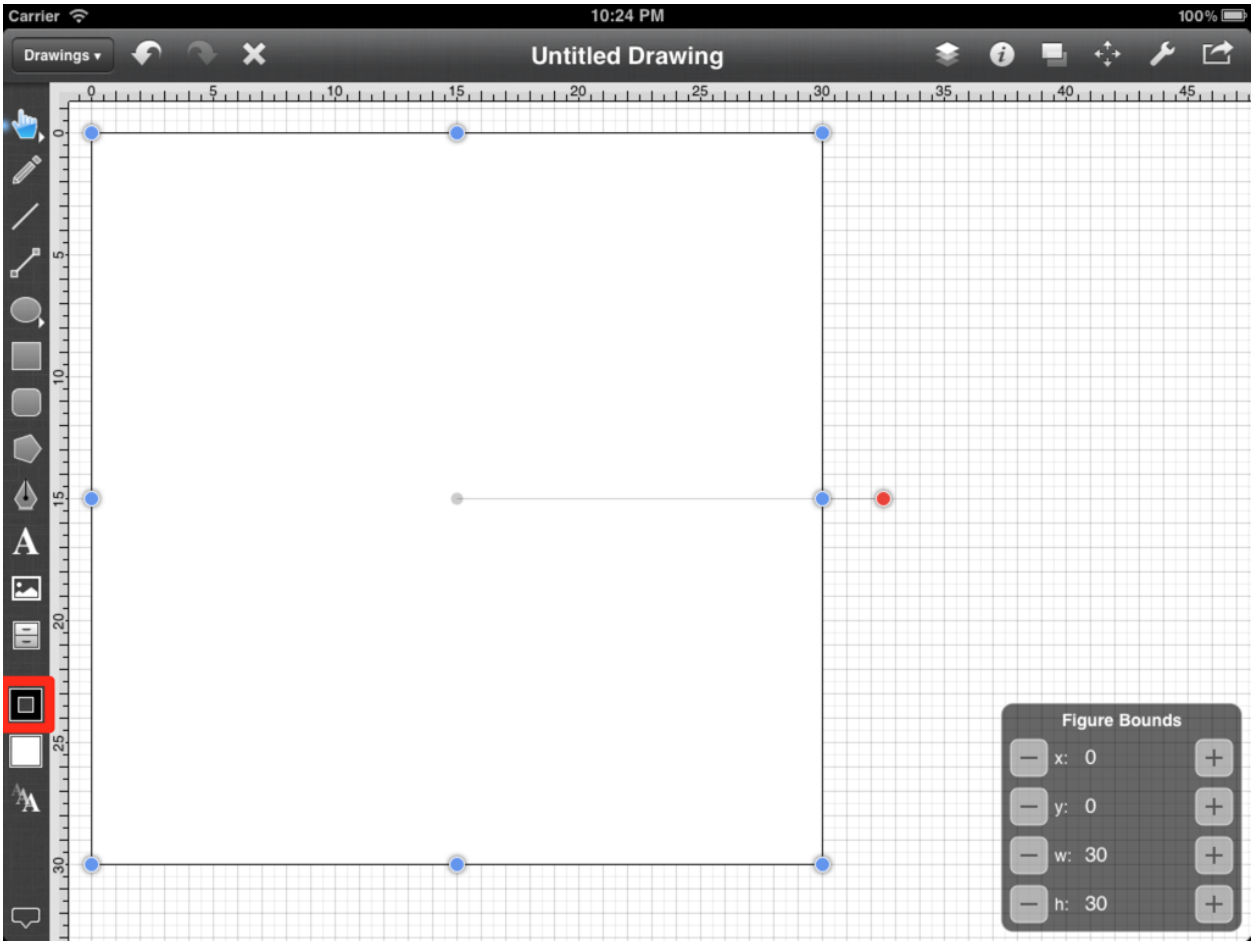
Continue to Next Step

6. Step 5 - Styling the Exterior Walls

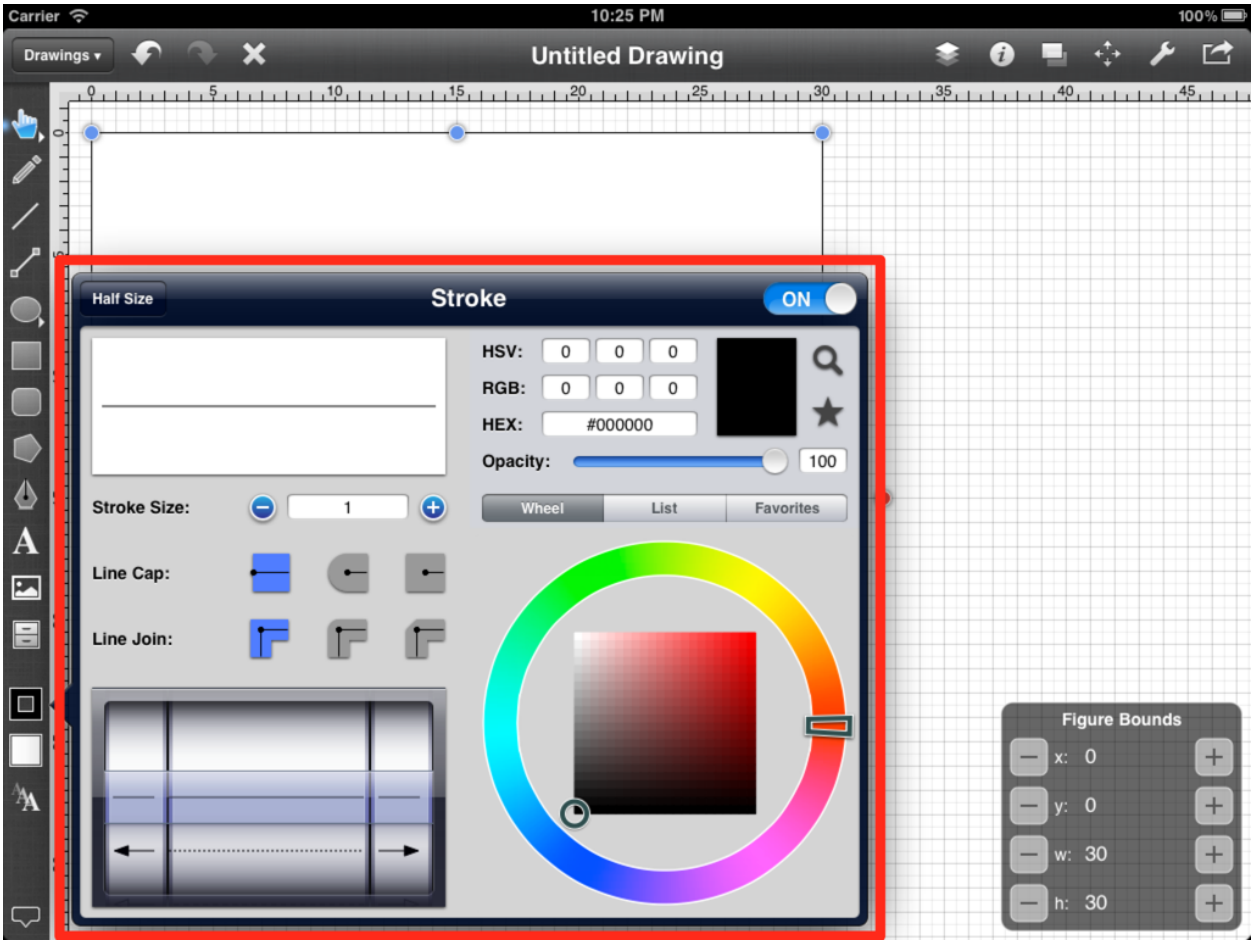
The next step is to change the styling (line thickness) of the exterior walls to make it obvious that these are walls (as opposed to other details being added to the drawing in subsequent steps).

First, make certain the rectangle drawn in the previous step is still selected. Eight blue handles and one red handle will be visibile if the figure is selected. Tap on the rectangle if it is not already selected.

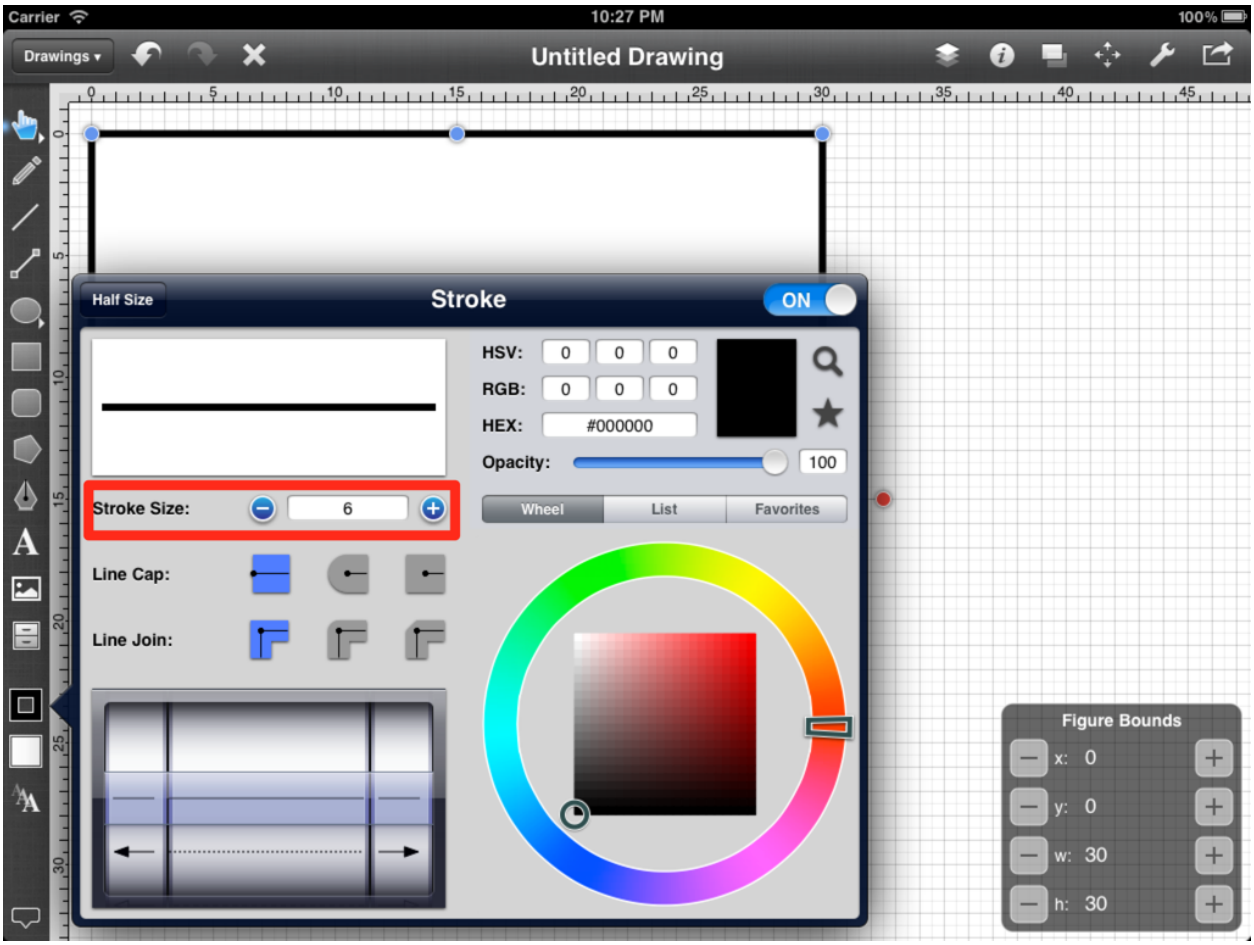
Second, open the Stroke Editor to change the line thickness. It can be opened by pressing on the button highlighted below within the Drawing Toolbar.



Once this button has been pressed, the **Stroke Editor** will open.



Use the Stroke Size buttons and text fields to change the value for the thickness of the line. As with the Overlay Tool, use the **plus** and **minus** buttons to increment the value one by one or tap in the text field to bring up the keyboard and edit the value directly.



For the purposes of this tutorial, the **Stroke Size** (line thickness) should be changed to 6.

Even though not all shown attributes are currently being used, these additional stroke (line) attributes can be changed from this menu as well.

As with other menus opened throughout this tutorial, simply tap outside of the **Stroke Editor** to dismiss it.

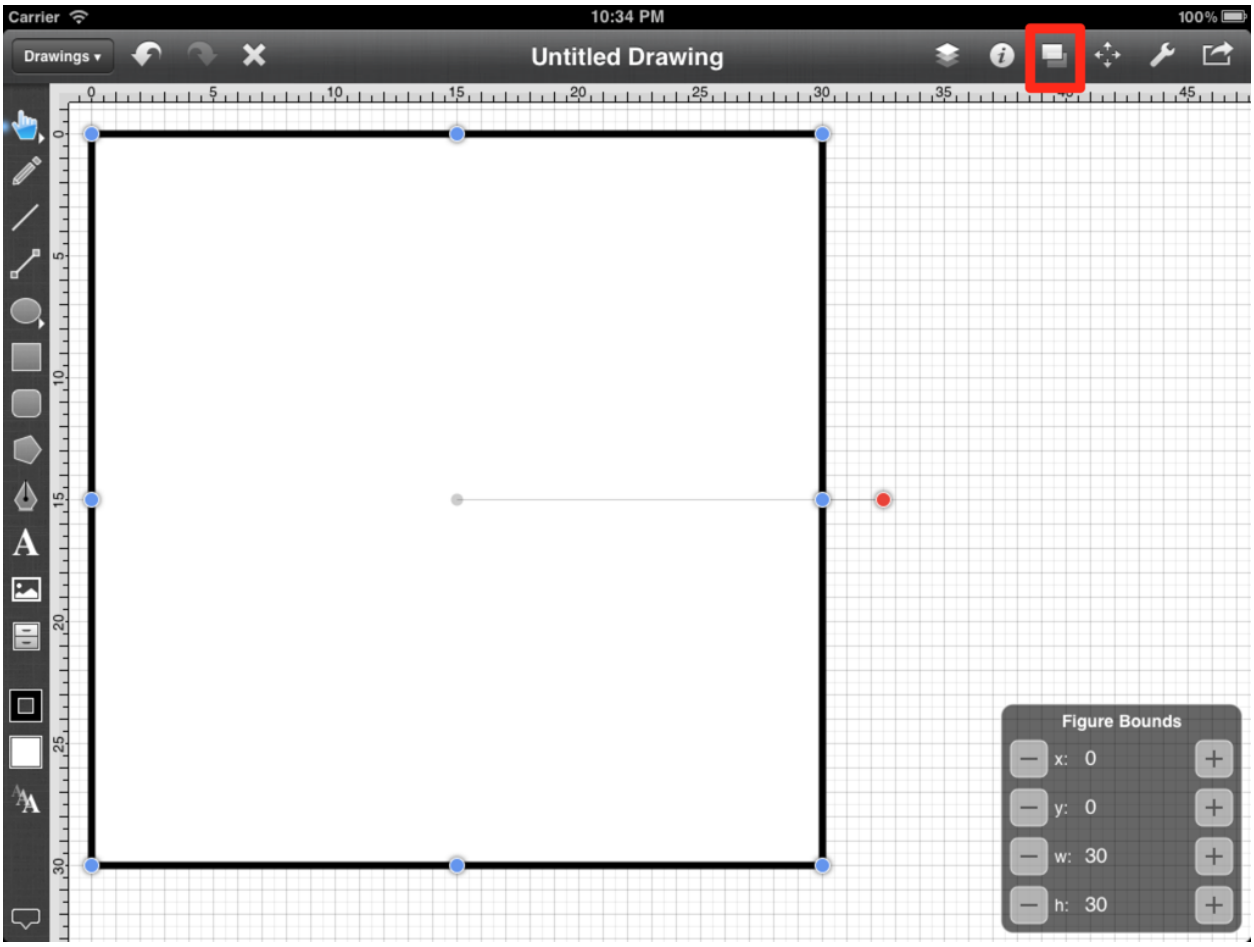
Continue to Next Step

7. Step 6 - Locking the Exterior Walls

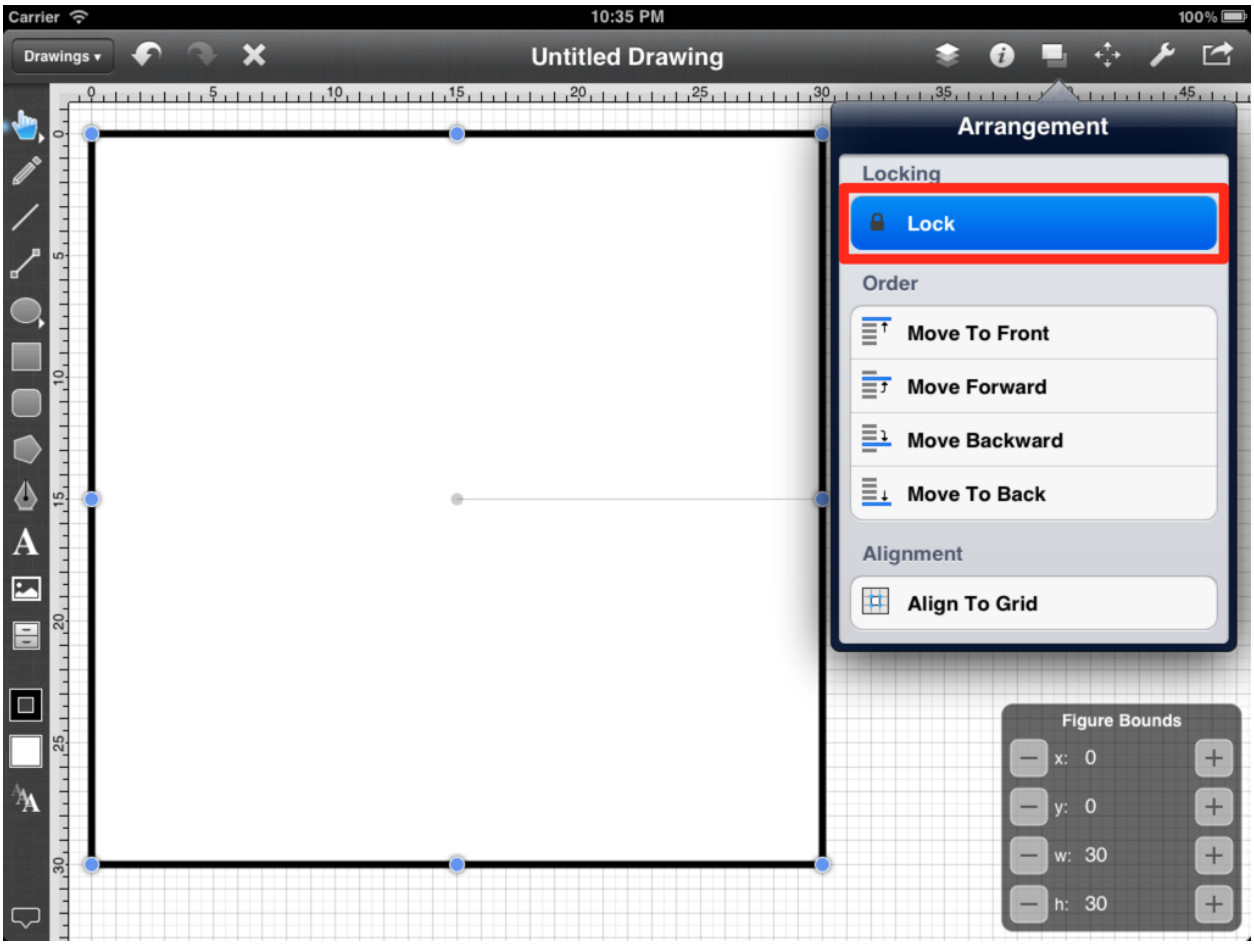
Once the shape has been created and is positioned correctly, it is good practice to Lock the shape to prevent it from being inadvertently moved.

First, make certain the drawn rectangle is still selected.

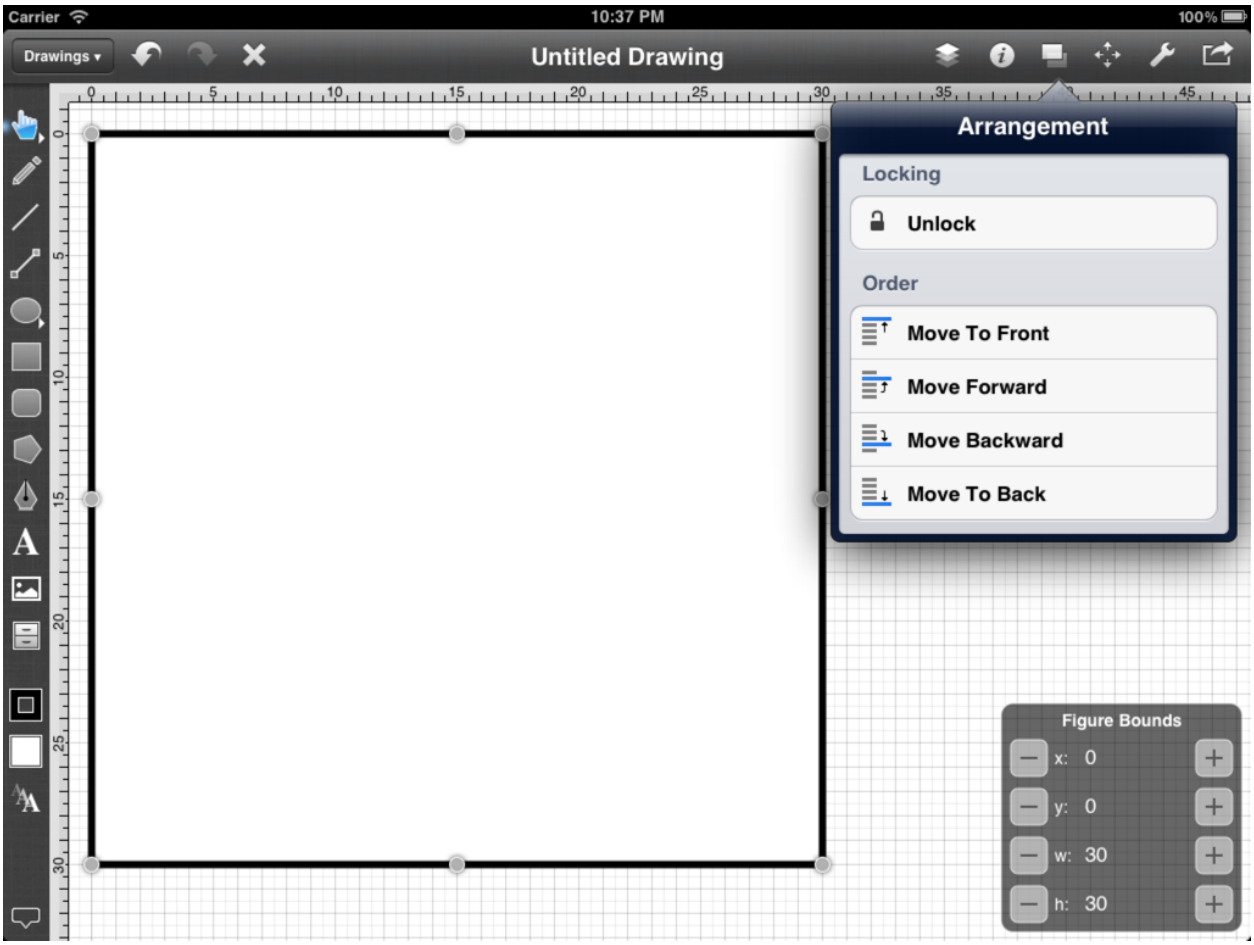
Second, open the Arrangement Menu.



Third, tap on the **Lock**option in the **Arrangement Menu** to lock the shape.

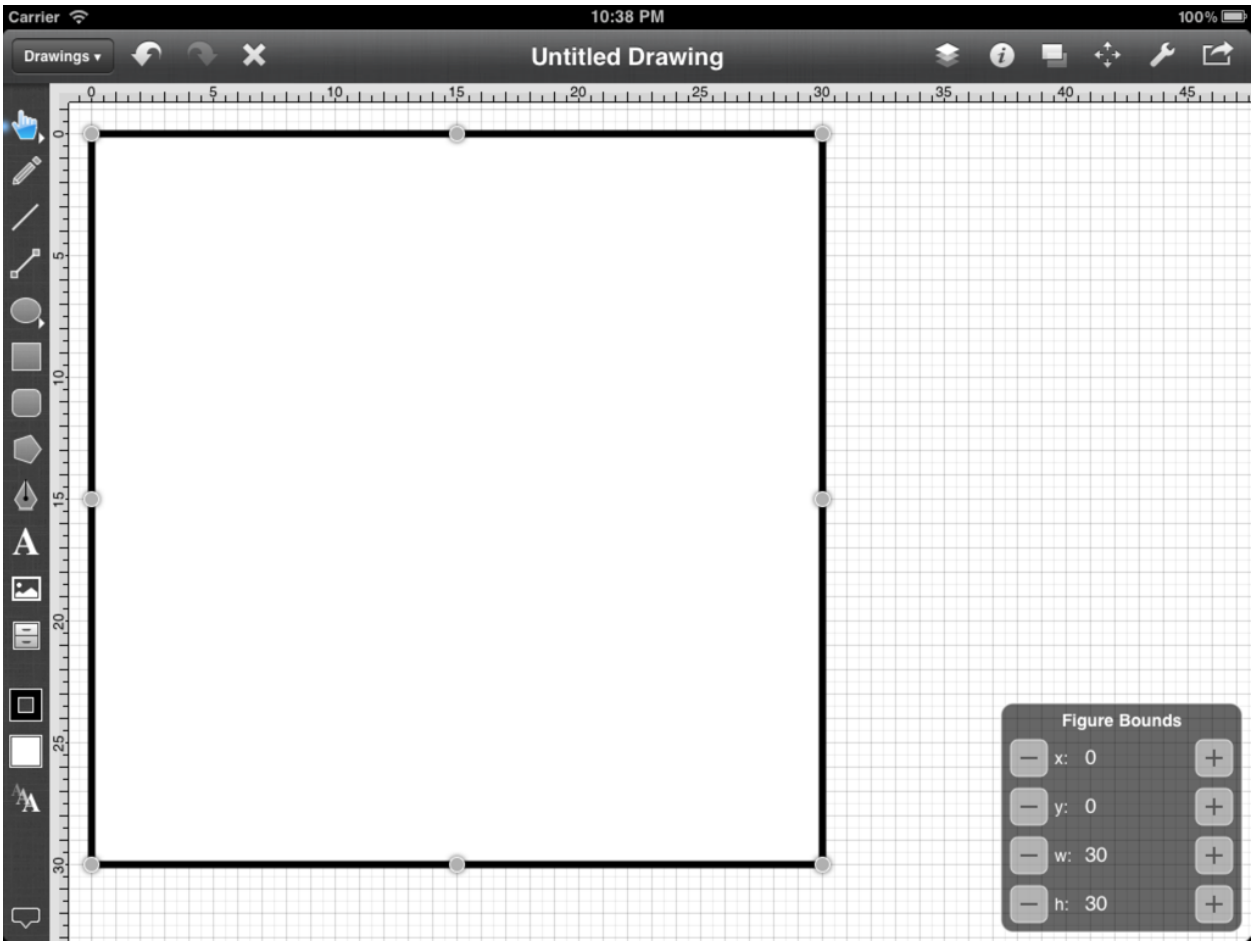


After the shape has been locked, the options in the **Arrangement Menu** will change.



This is because all of the menus in TouchDraw are _contextual_and only show valid options that apply to the currently selected figure(s).

Second, once the **Arrangement Menu** has been dismissed, you will notice the handles for the shape are no longer blue and have changed to gray. This is a visual indication that the currently selected shape is locked and cannot be moved.



Continue to Next Step

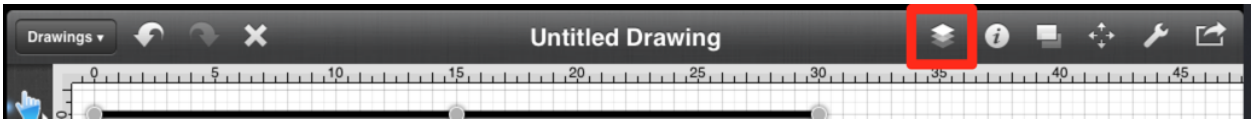
8. Step 7 - Configuring the Layers

In order to organize the drawing better and allow editing of shapes that overlay other shapes without risking selecting objects within the background, we will use the layers feature of TouchDraw. Imagine a stack of paper where each layer is like a sheet of paper in that stack. One of those sheets of paper can be drawn without impacting what's on the other sheets of paper; however, where layers differ is that layers are like transparent pieces of paper. One sheet can be drawn while seeing what is on the sheets above and below it without impacting them (if other layers are locked).

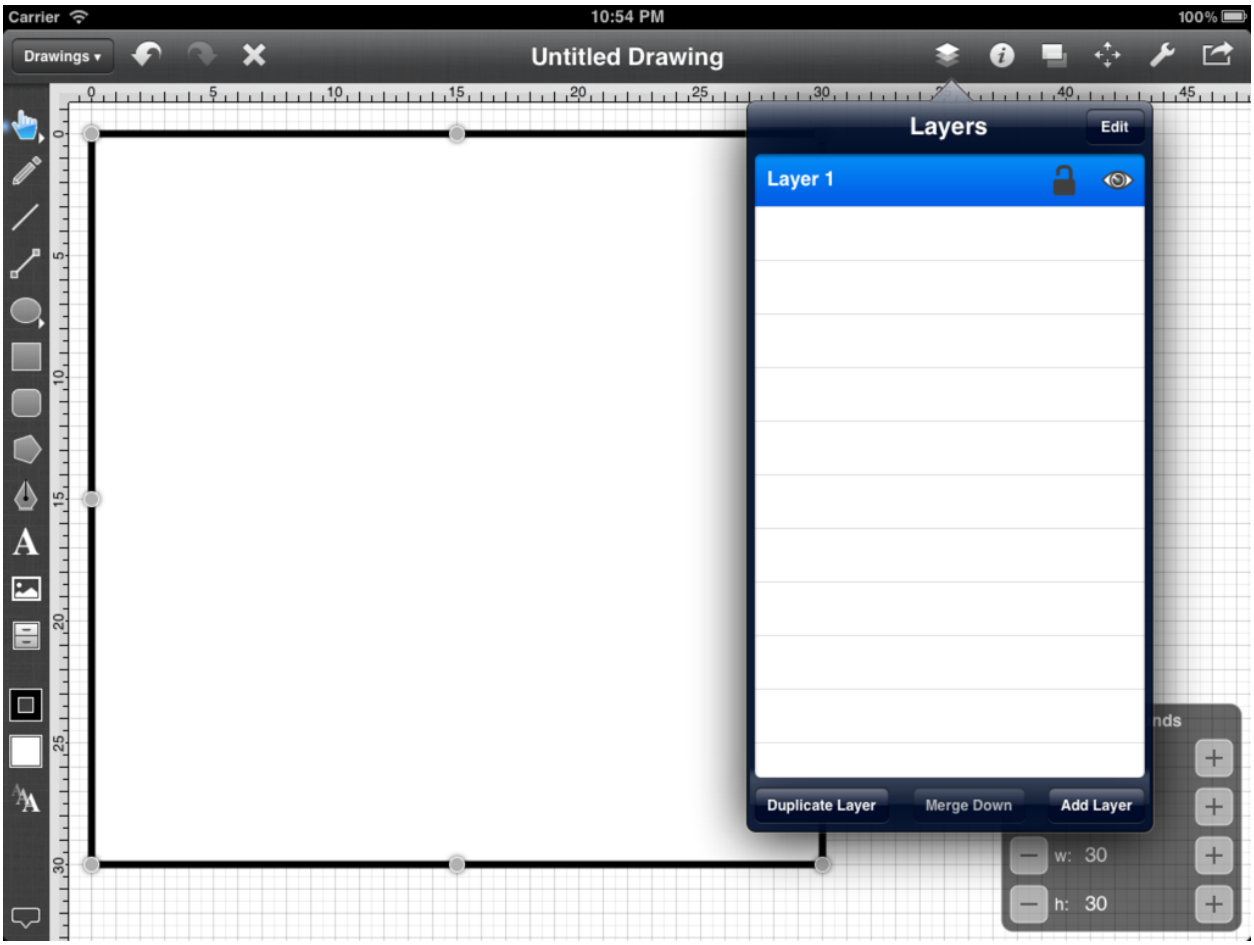
Right now, only one layer resides within the drawing (which has the default name "Layer 1"); however, when the tutorial is completed, the drawing will have a total of 10 layers:

1Exterior Walls
2Interior Walls
3Door Cutouts
4Doors
5Stairs
6Bathroom Fixtures
7Fireplace
8Kitchen
9Dimensions
10Room Names

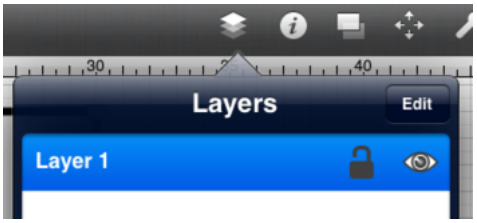
Open the Layers Menu to begin setting up the layers. This can be done by pressing on the **Layers Button** in the Top Toolbar (highlighted below).



Once the **Layers Menu** has been opened, the following menu will appear:



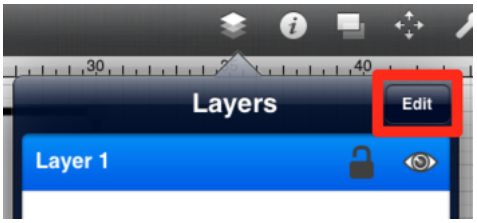
The **Layers Menu**currently lists Layer 1 as the only layer in the drawing.



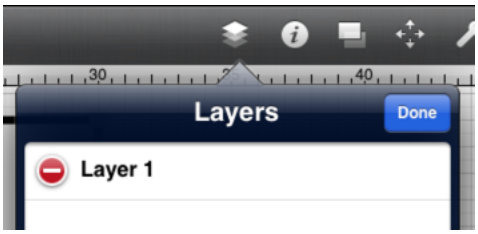
Two icons (buttons) reside to the right of the layer name. The first button is both an indicator and toggle for whether or not that specific layer is locked. The second button is both an indicator and toggle for whether or not that layer is visible. When a layer is locked (and visible) the contents of that layer can be seen; however, it will not be able to be selected or edited. This is a useful option for drawing over something in the background without worrying about accidentally selecting or modifying it.

First, rename *Layer 1* to **Exterior Walls**. This process can be started by pressing on the **Edit Button** in the

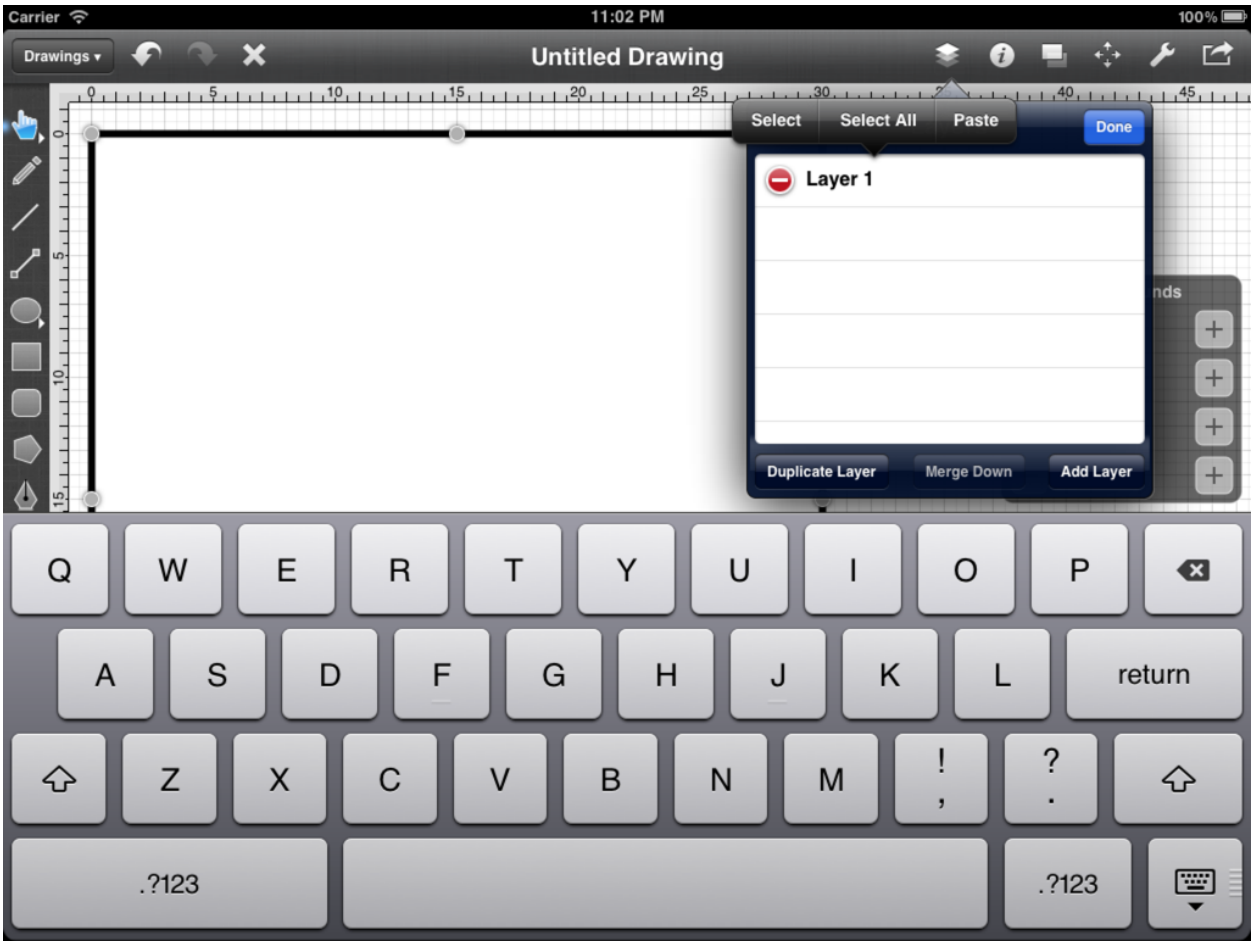
Layers Menu .



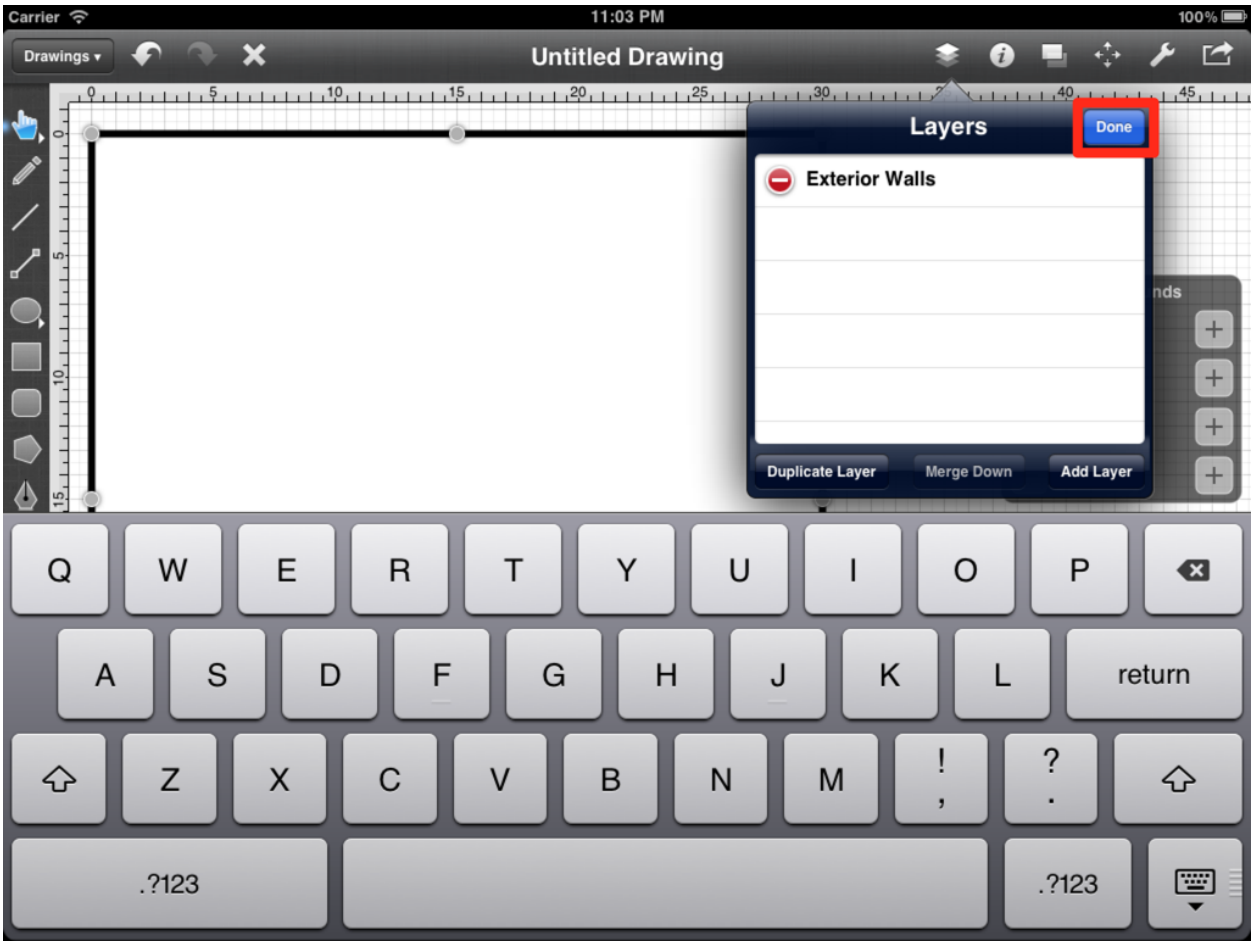
After pressing on the **Edit Button**, the menu will change and appear as follows.



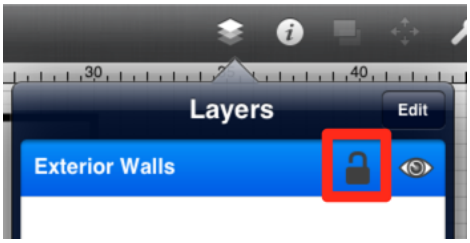
While not needed now, the **Delete Item Button** (red circle with minus sign) is available for deleting the selected layer. To rename the layer, tap on the name of the layer to bring up the keyboard for editing the name.



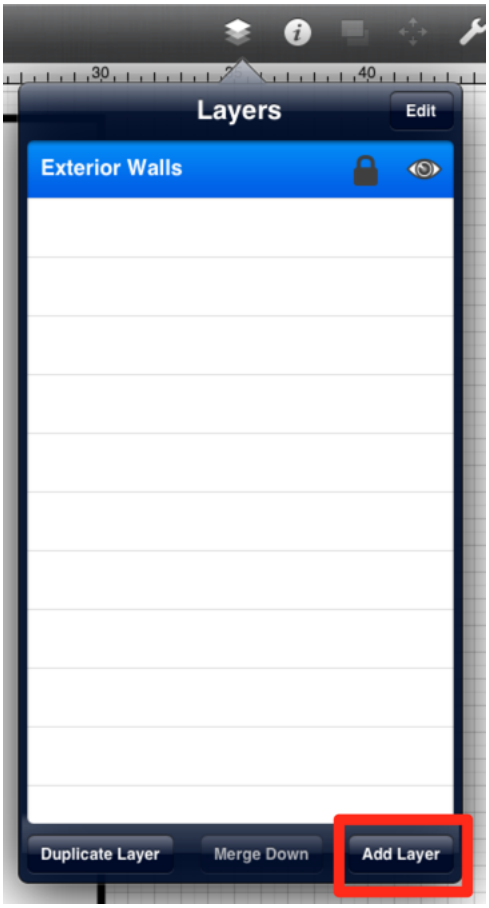
After the layer has been renamed to **Exterior Walls**, press on the blue **Done Button** in the upper right hand corner of the **Layers Menu** to save the change and exit the special edit mode.



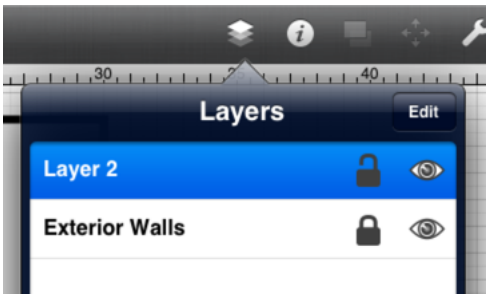
Next, press on the **Lock Icon** (Button) to lock this layer since no additional changes will need to be made to the **Exterior Walls**.



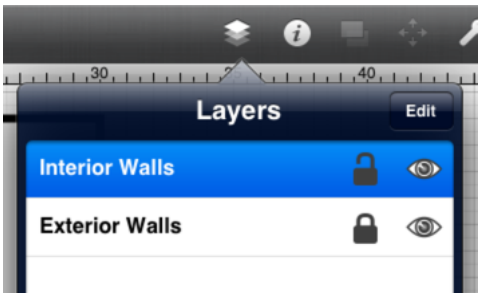
Creating a layer for the interior walls is the next step of this process. To accomplish this addition, press on the **Add Layer Button** located in the bottom of the menu.



After pressing on the **Add Layer Button**, TouchDraw will add and select a new layer called **Layer 2**.



Repeat the steps above for renaming *Layer 1* to _Exterior Walls_to rename *Layer 2* to **Interior Walls**.

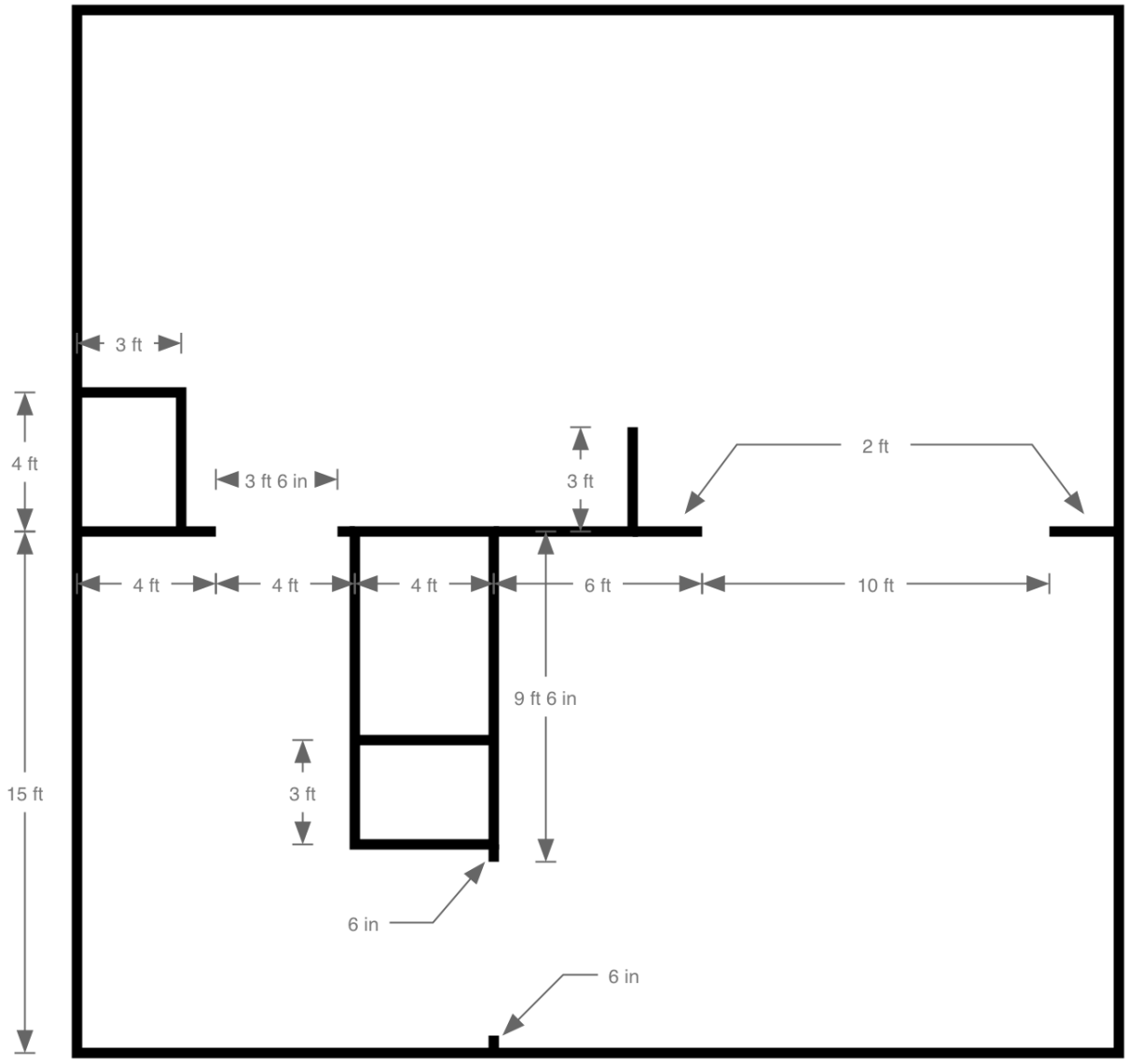


Note: Make certain the **Interior Walls** layer is selected (highlighted in blue) before dismissing the Layers Menu when completing this step. When the shapes are created in the next step, they will be added to the currently selected layer, which should be the **Interior Walls** layer.

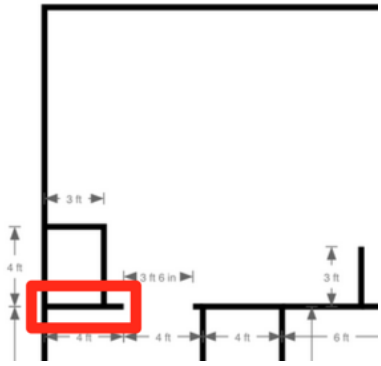
Continue to Next Step

9. Step 8 - Creating the Interior Walls

The next step is to create the interior walls for the drawing. We created the following diagram to provide a guide as to where the walls should be placed (also done as an additional layer within the TouchDraw drawing):

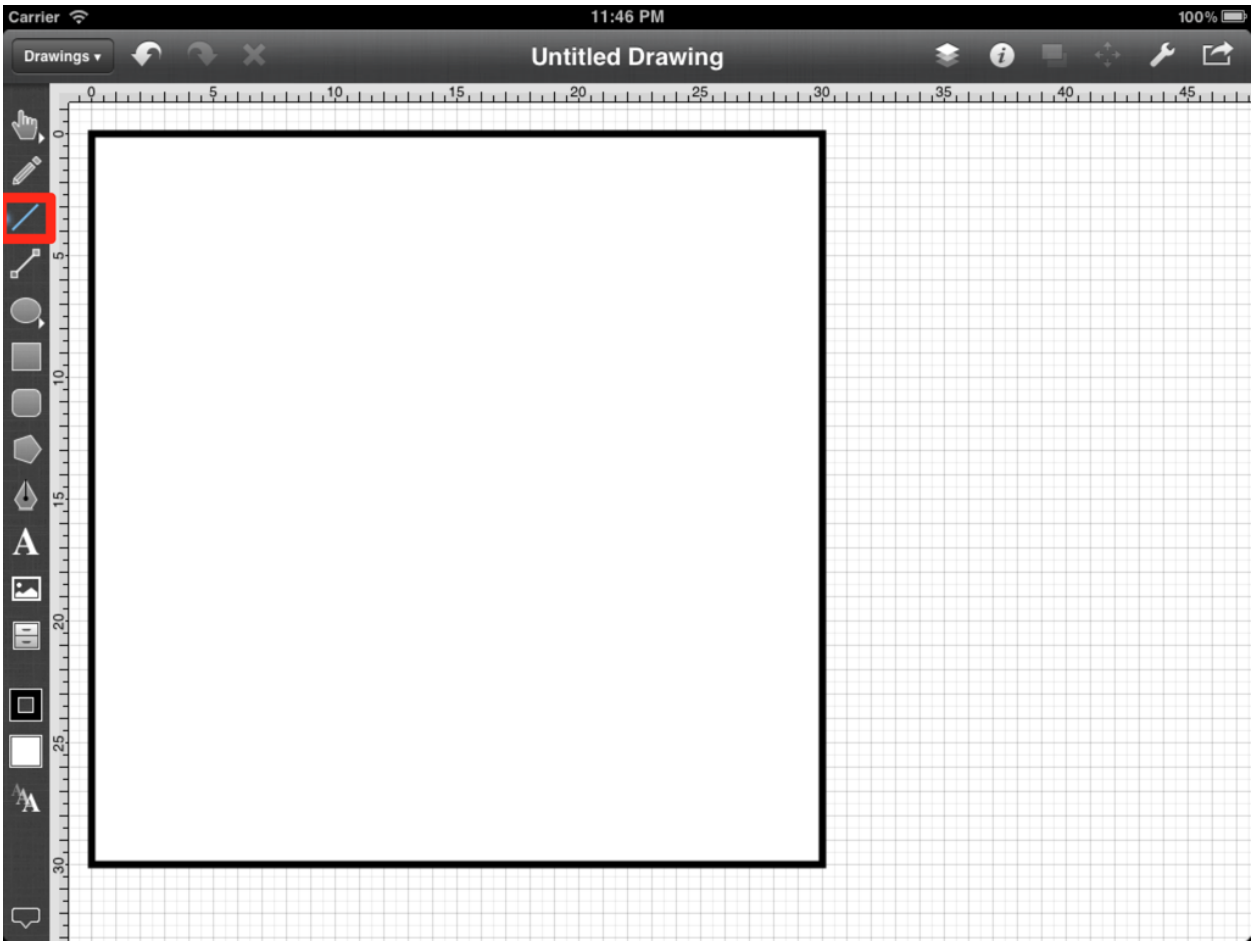


Start by drawing the the wall highlighted below.

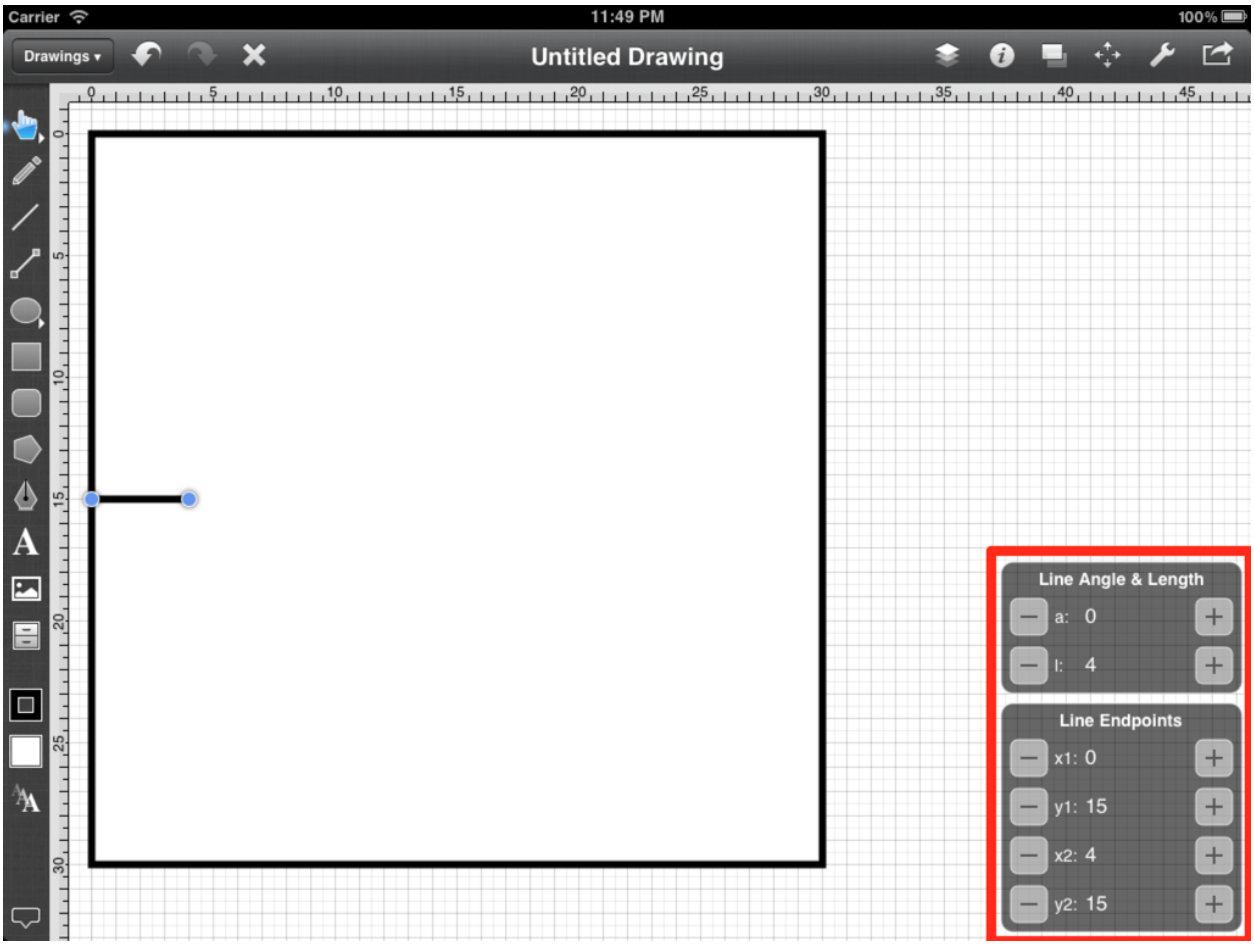


First, as with the exterior walls, the interior walls should be drawn with a line thickness of 6. TouchDraw will remember that the last stroke size we worked with was 6; however, it is good to know that the attributes (stroke, fill, text, etc...) for a shape can be set before creating it. In this case, had the stroke thickness been changed in the meantime, you could set the stroke thickness for all new lines drawn by opening the **Stroke Menu** and setting the Stroke Size as done in a previous step.

Second, the Line Tool will need to be used to create the interior walls, as shown by the highlighted item in the screenshot below.

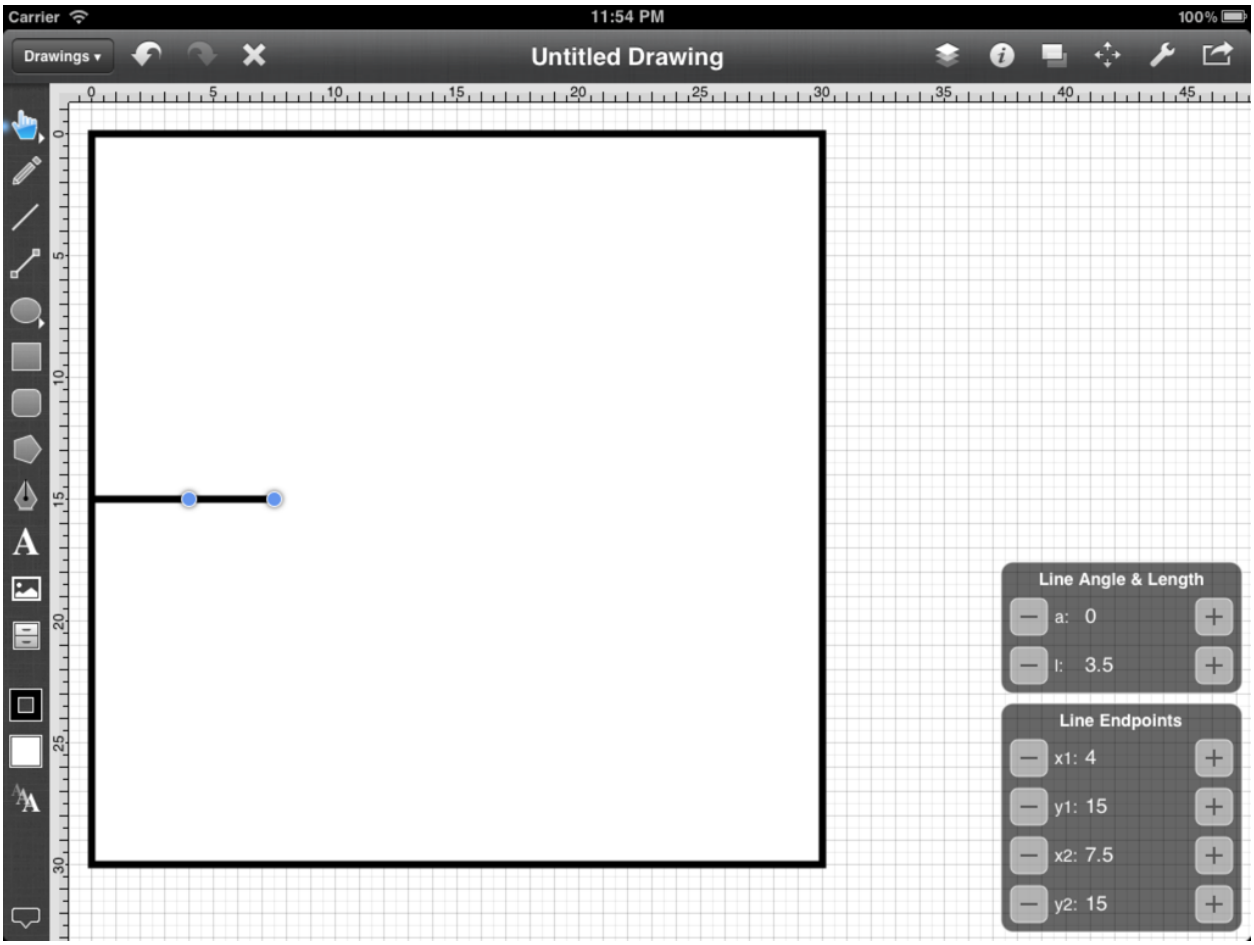


From the dimensions shown above, we know that the first interior wall is 15 ft down from the top left of the drawing (and also 15 ft up from the bottom left) and 4 ft long. As with drawing a rectangle, we can tap and drag to create a line.

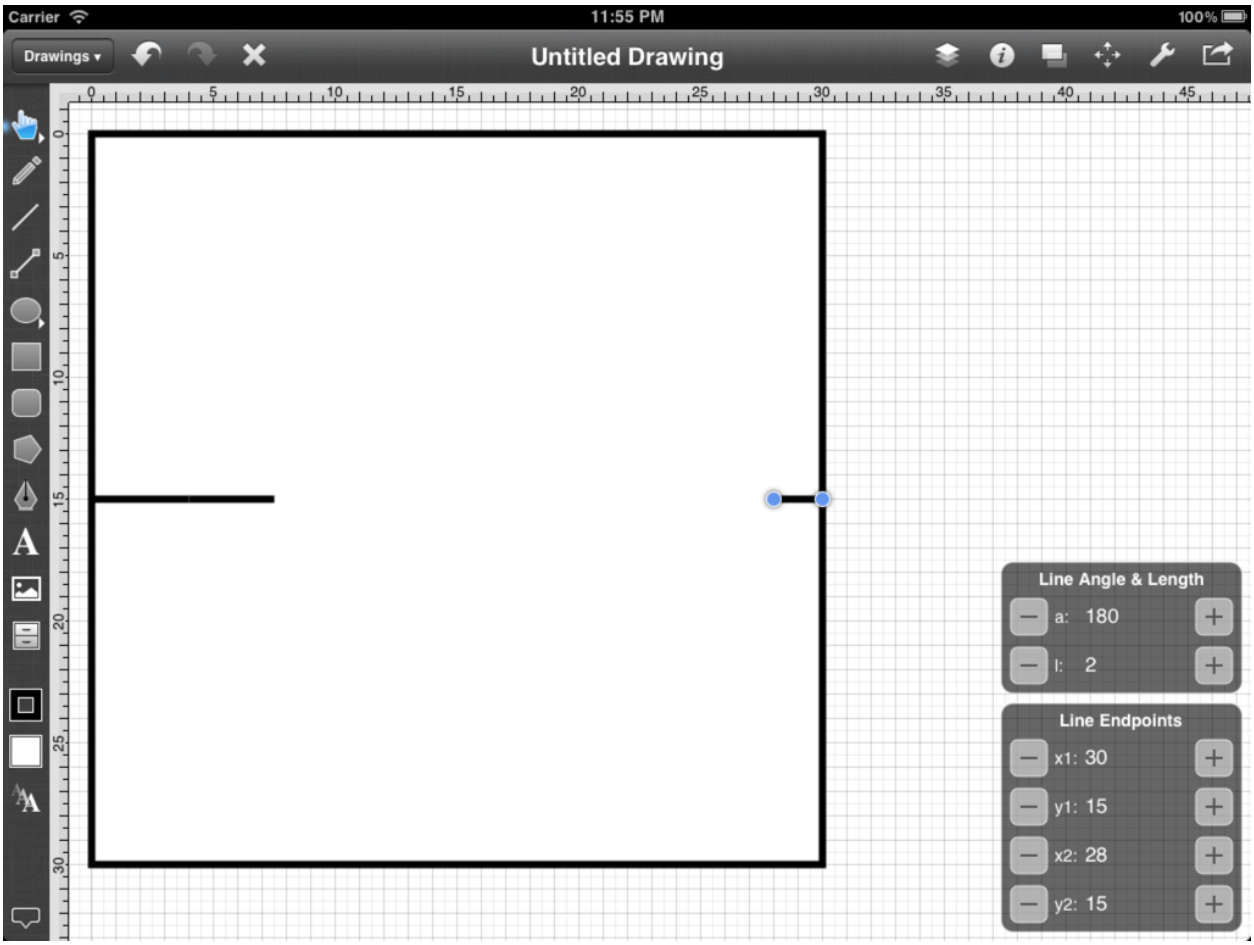


If the Overlay Feature is still enabled, all overlays applicable to the line will appear after it has been drawn. The angle, length, start points, and end points of the line can be edited. As before, either drag the blue handles or use the overlays to edit the location of the line.

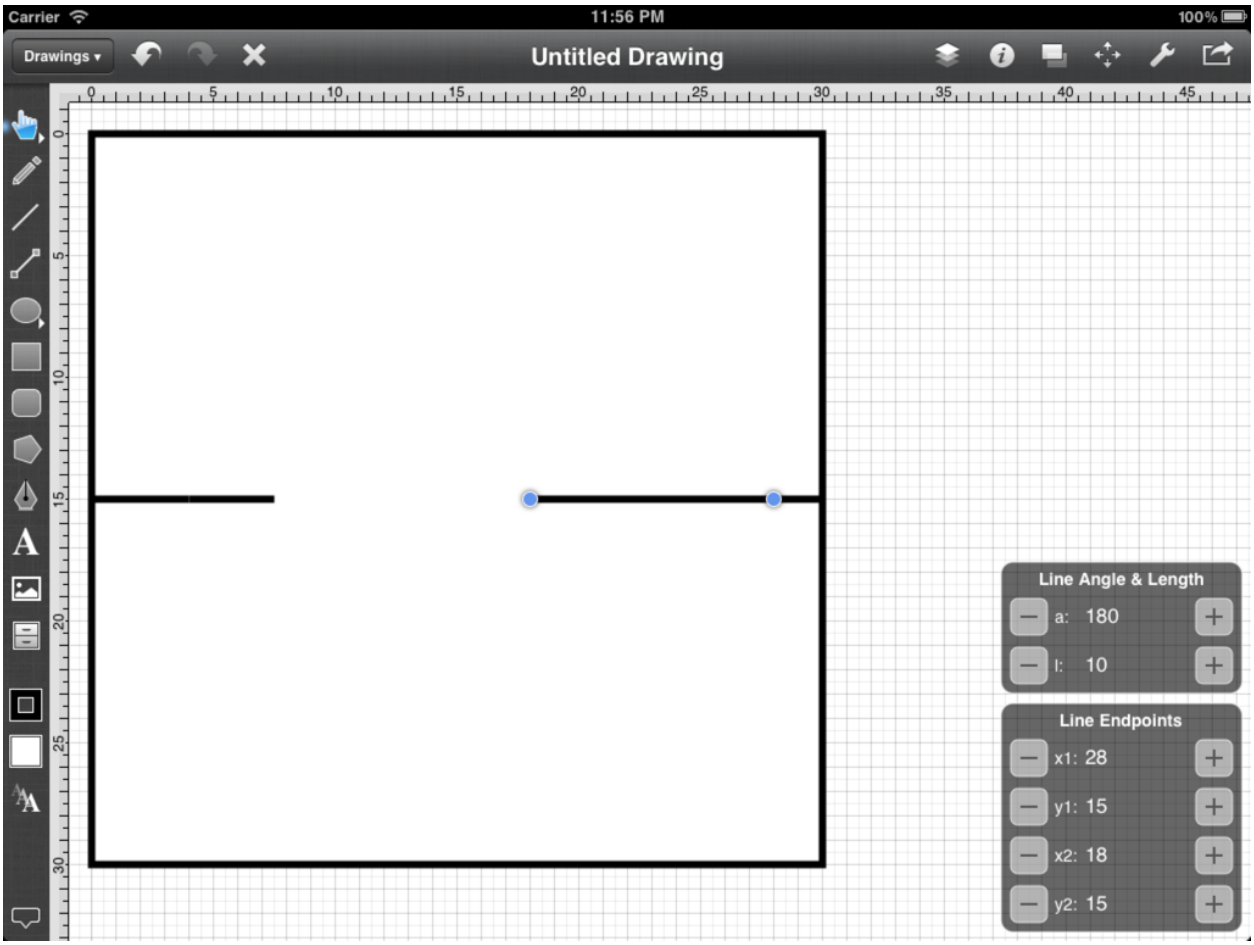
Next, we know from the dimensions above that there is a 3 ft 6 in open doorway to the right of that wall. We will draw a temporary line in that space to use as a point of reference for other walls to be drawn later.



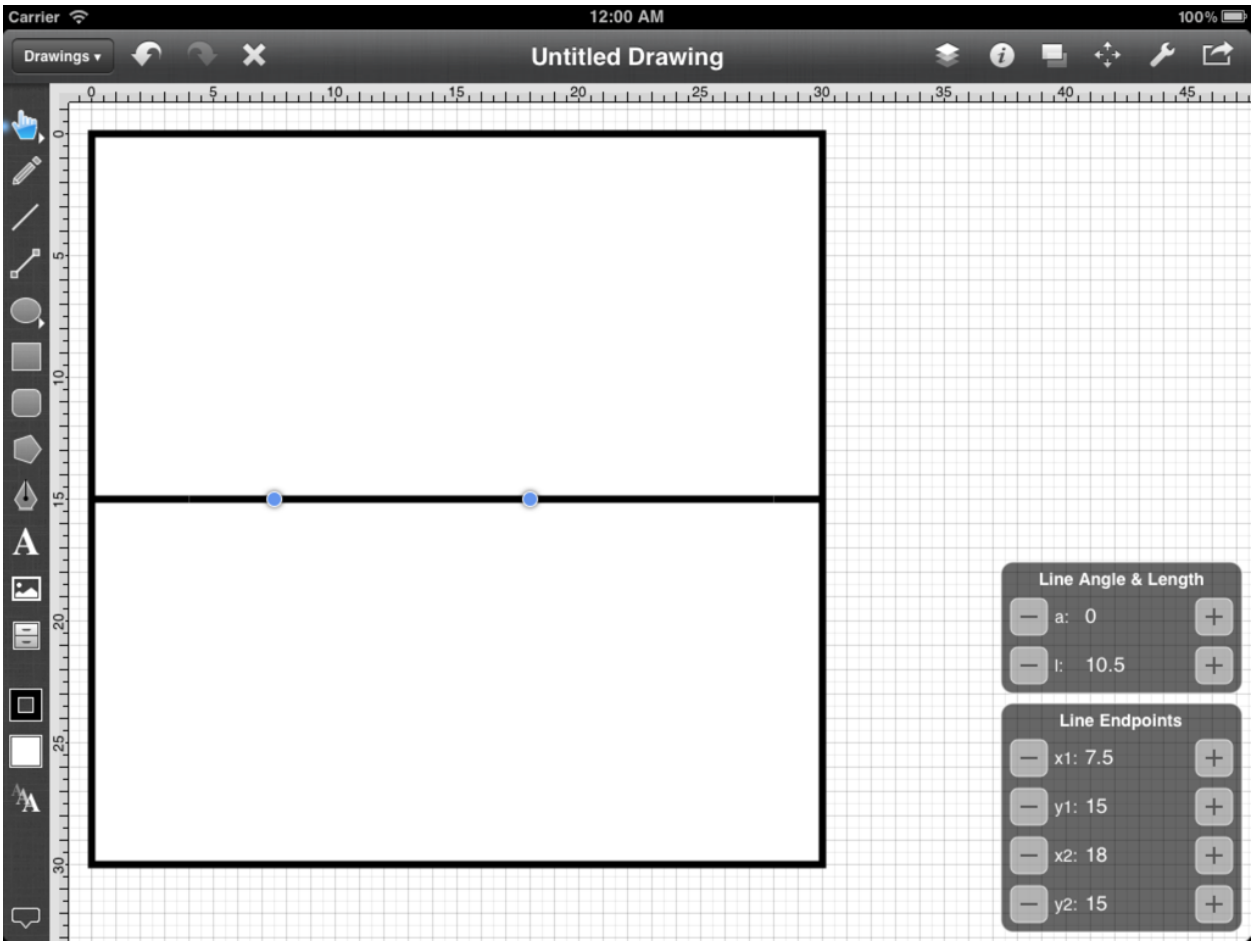
Next, we'll move to the opposite side of the house and draw the 2 ft wall there.



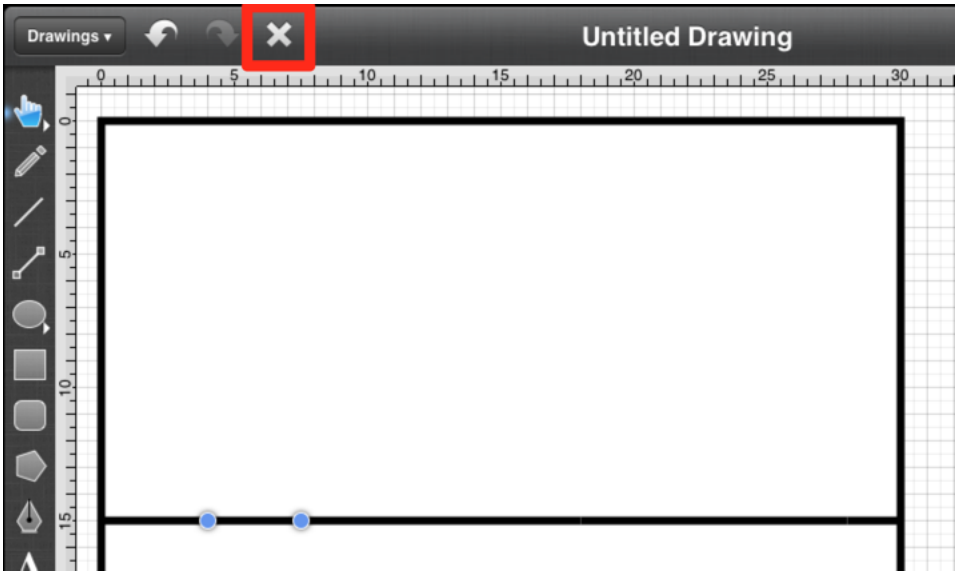
Next, as above, draw another temporary line for the 10 ft opening to the left of that wall.



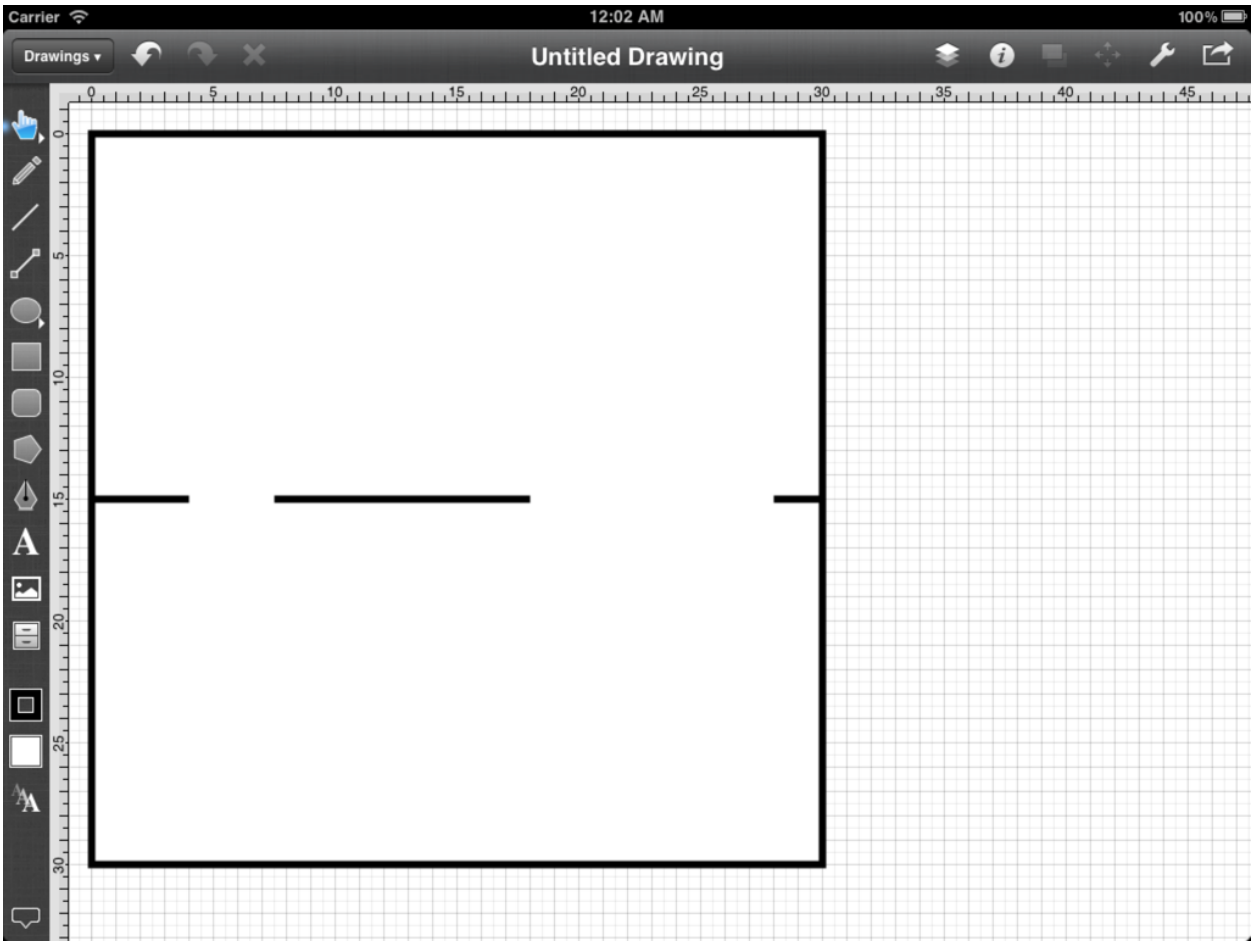
Next, draw the wall that fills the empty space between the two temporary lines.



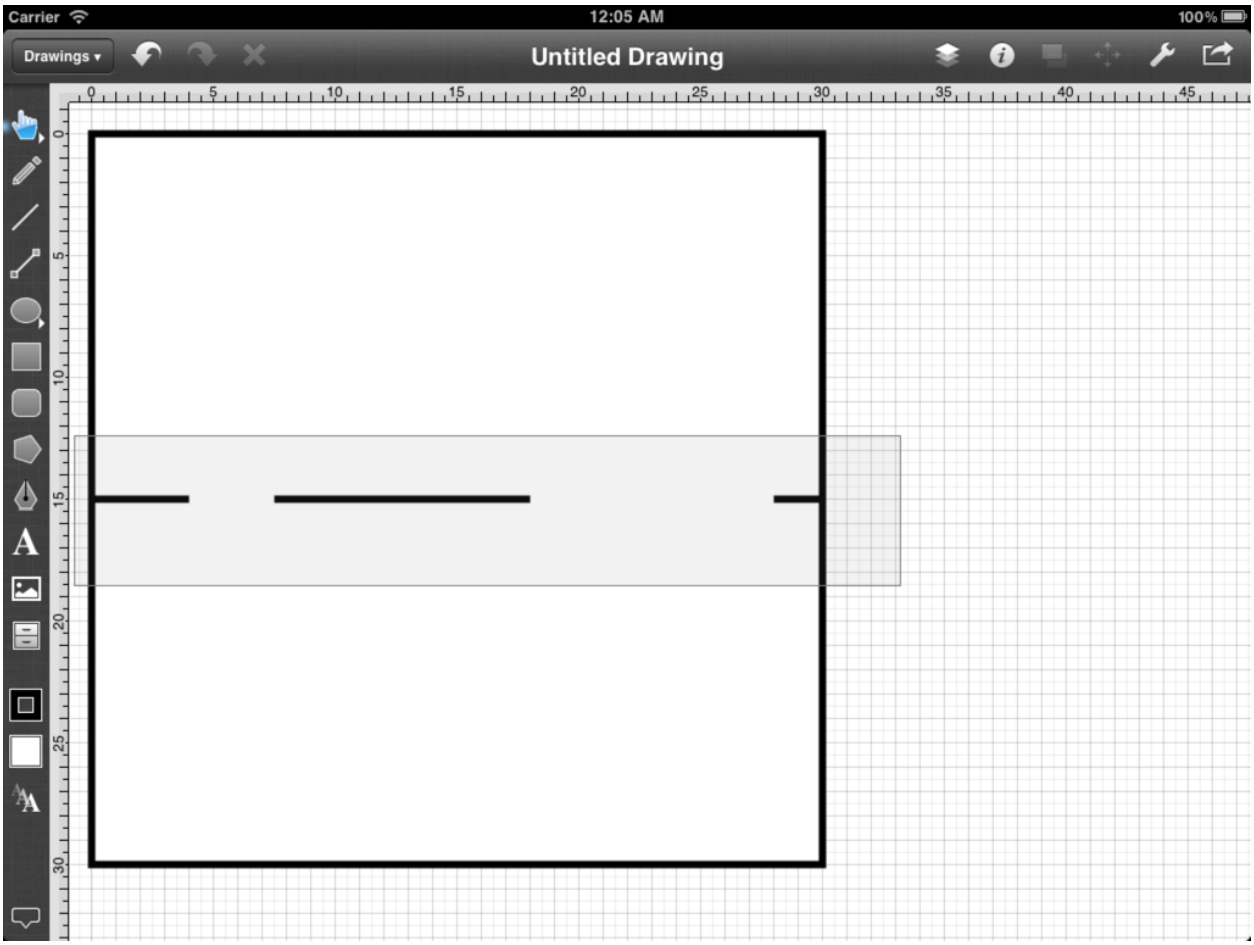
Next, delete the two temporary lines since they are no longer needed. To do this, first tap on one of the lines to select it, and then press on the **Delete Button** (the X) in the Top Toolbar to delete the lines from the drawing.



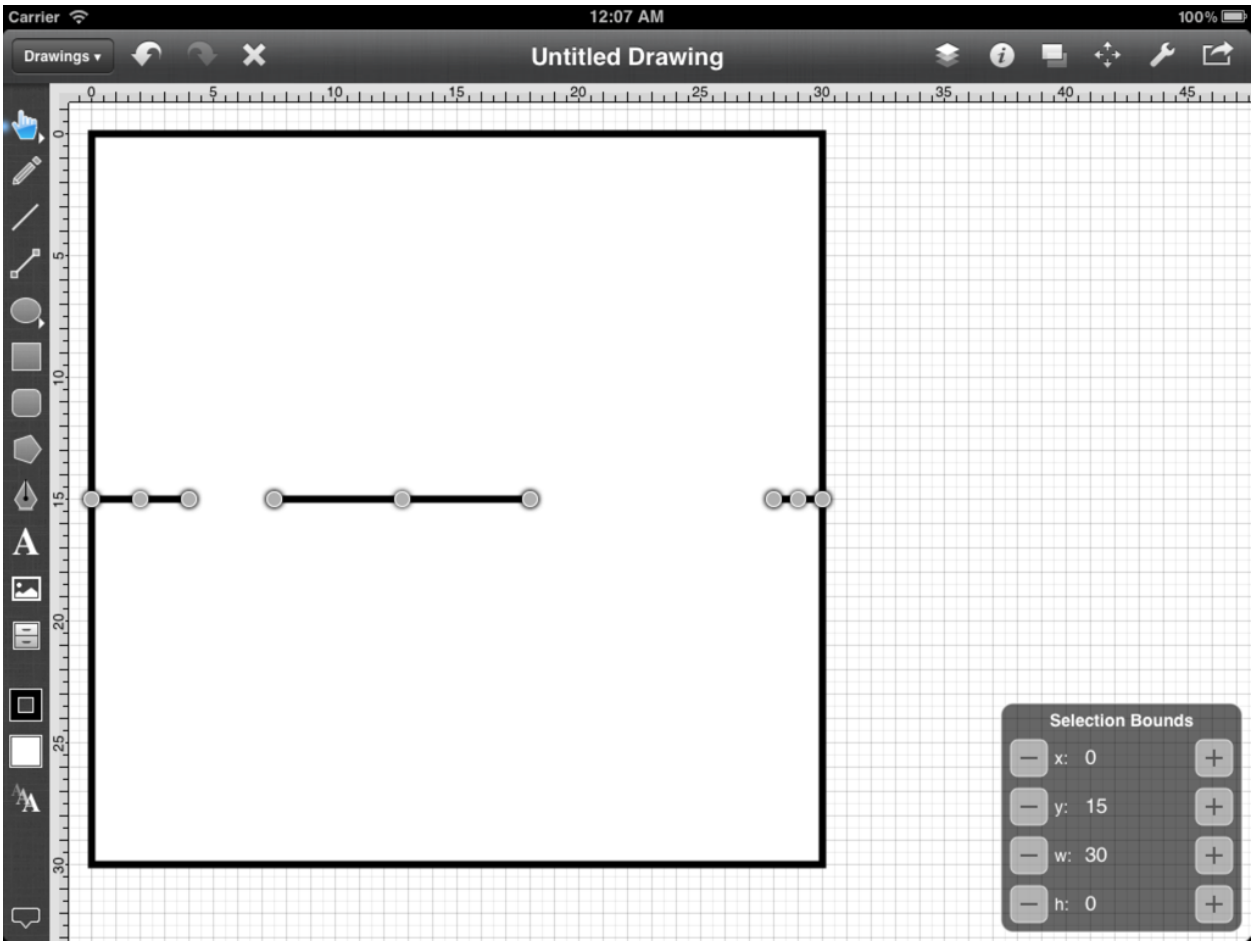
After both temporary segments have been deleted, the drawing should look like the following screenshot example:



Next, as a matter of good practice, the created walls should now be selected and locked. They can be locked all at once rather than going through the trouble of locking them one by one. With the Selection Tool enabled (the one that looks like a pointing finger), perform a **Touch/Drag** gesture combination to draw a rectangle around all of the shapes and select them.

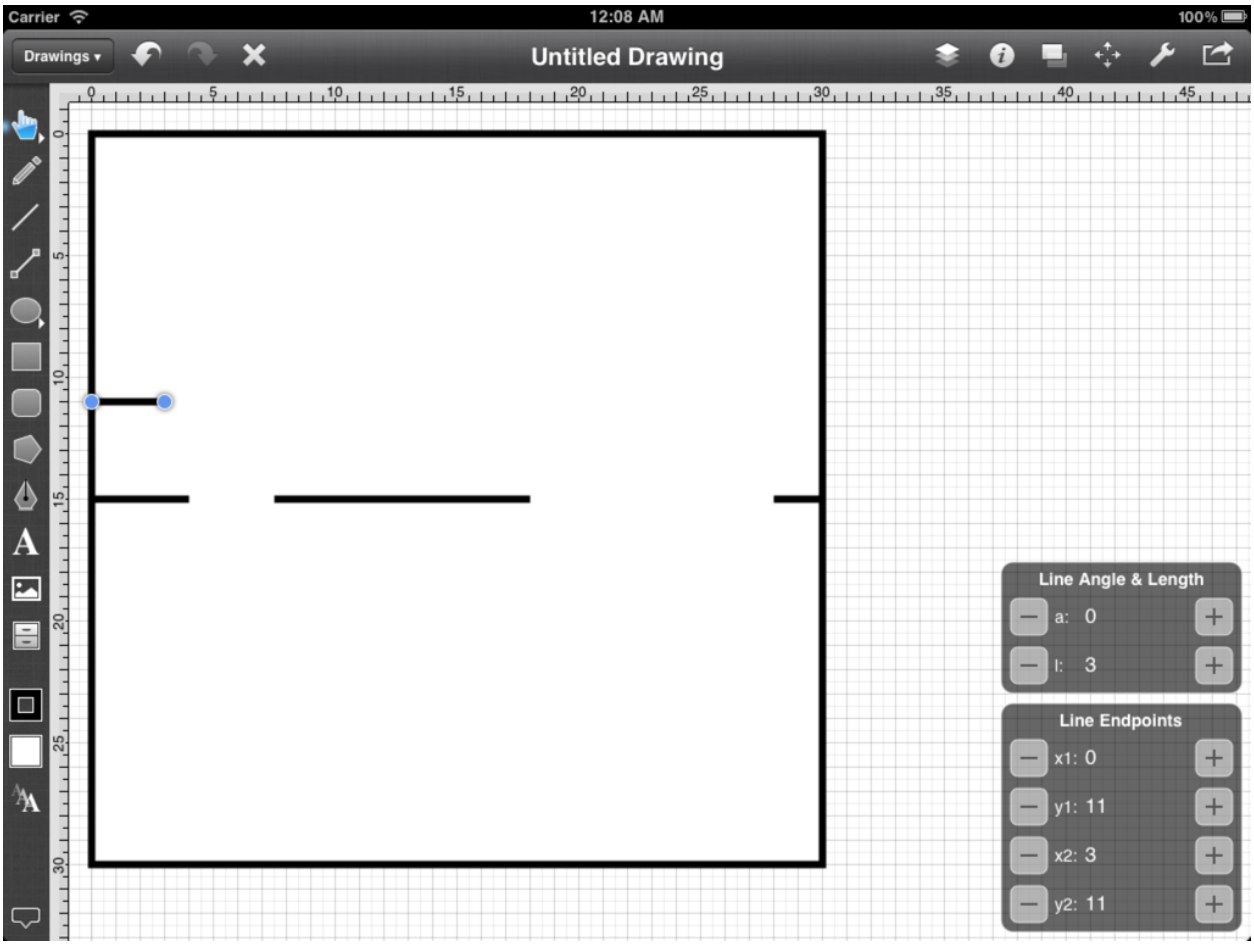


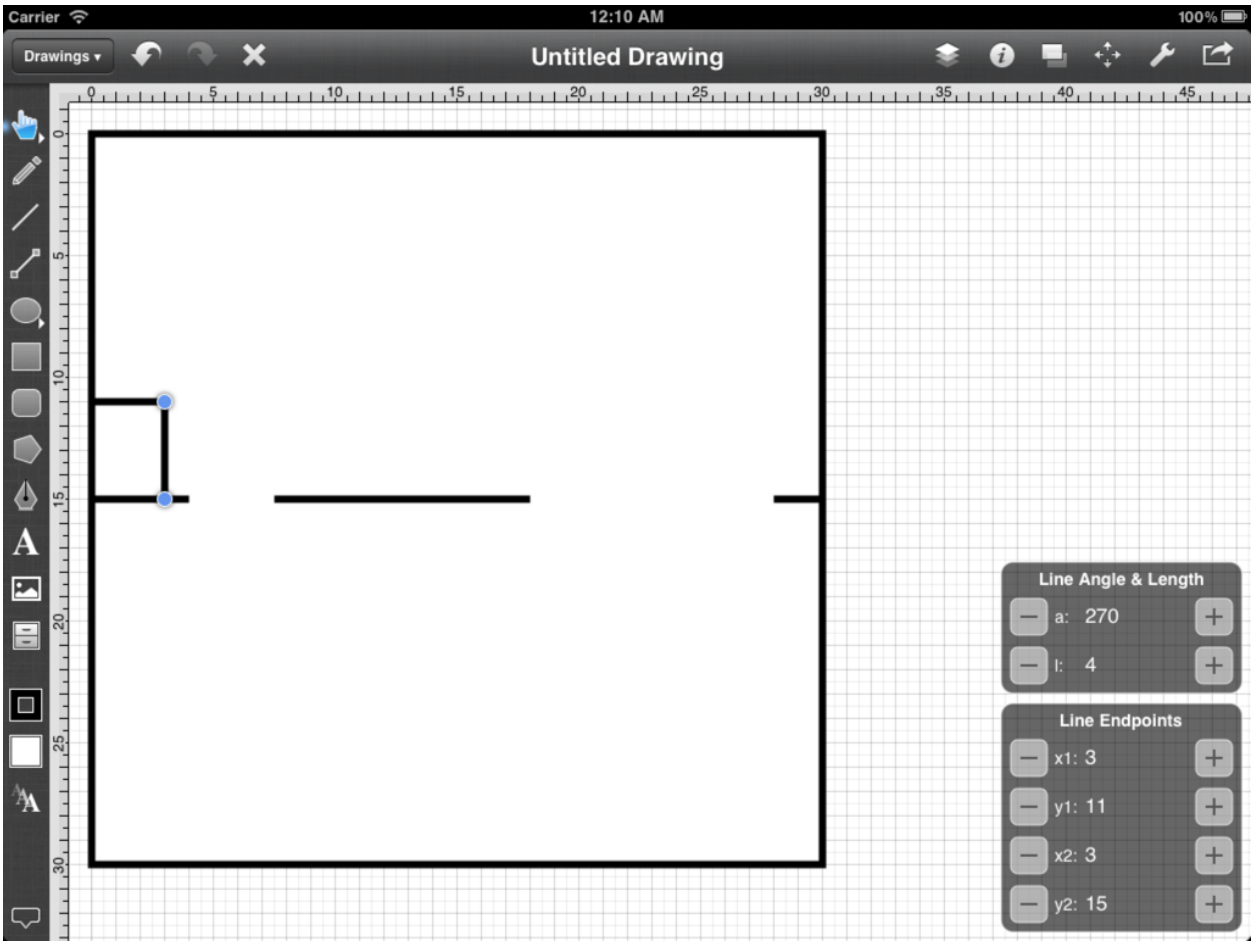
Once all shapes have been selected, open the Arrangement Menu and select the **Lock**option.



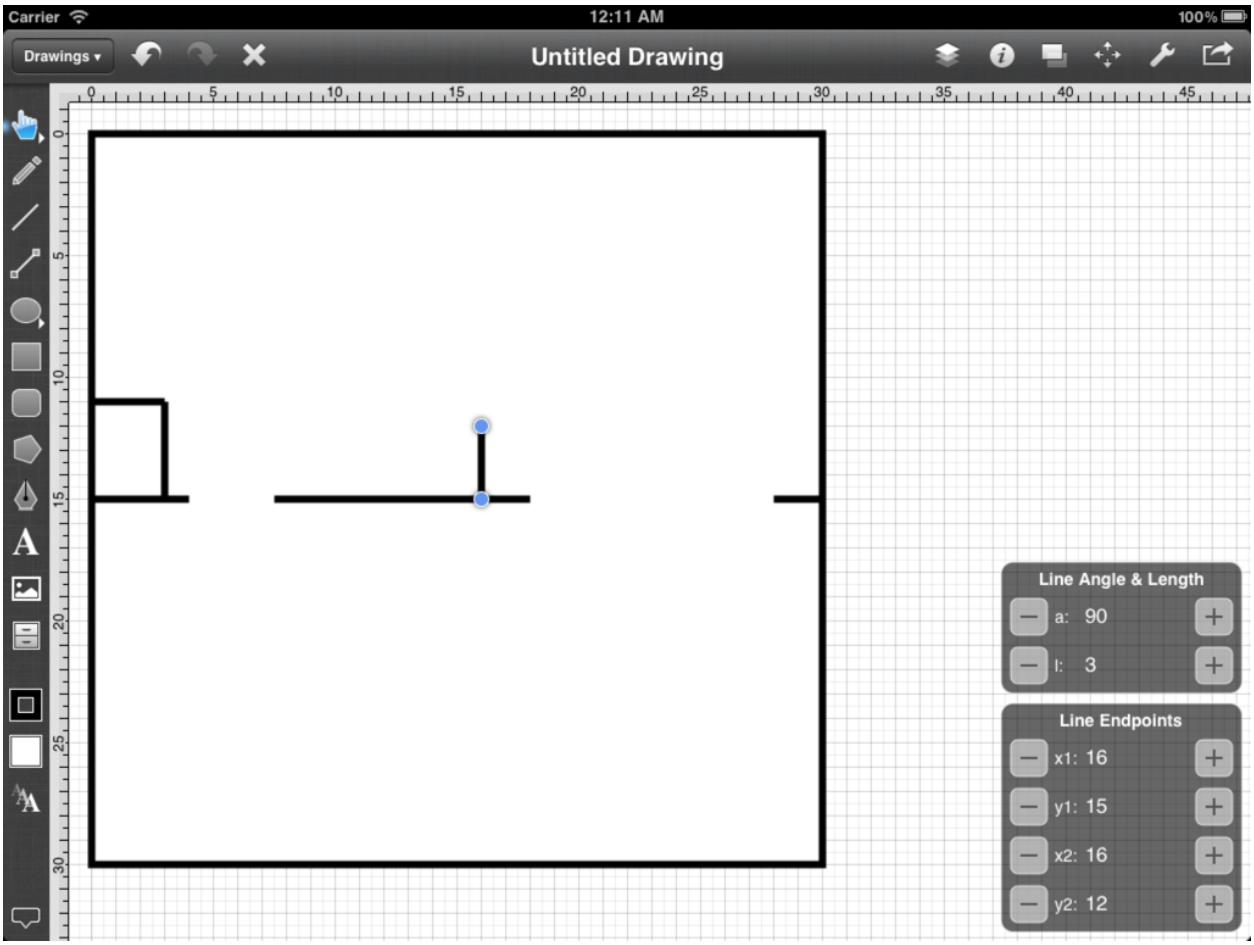
Next, draw the walls for the Kitchen Closet.

Either use the grid and the ruler as points of reference or draw temporary reference lines to get the proper offset.

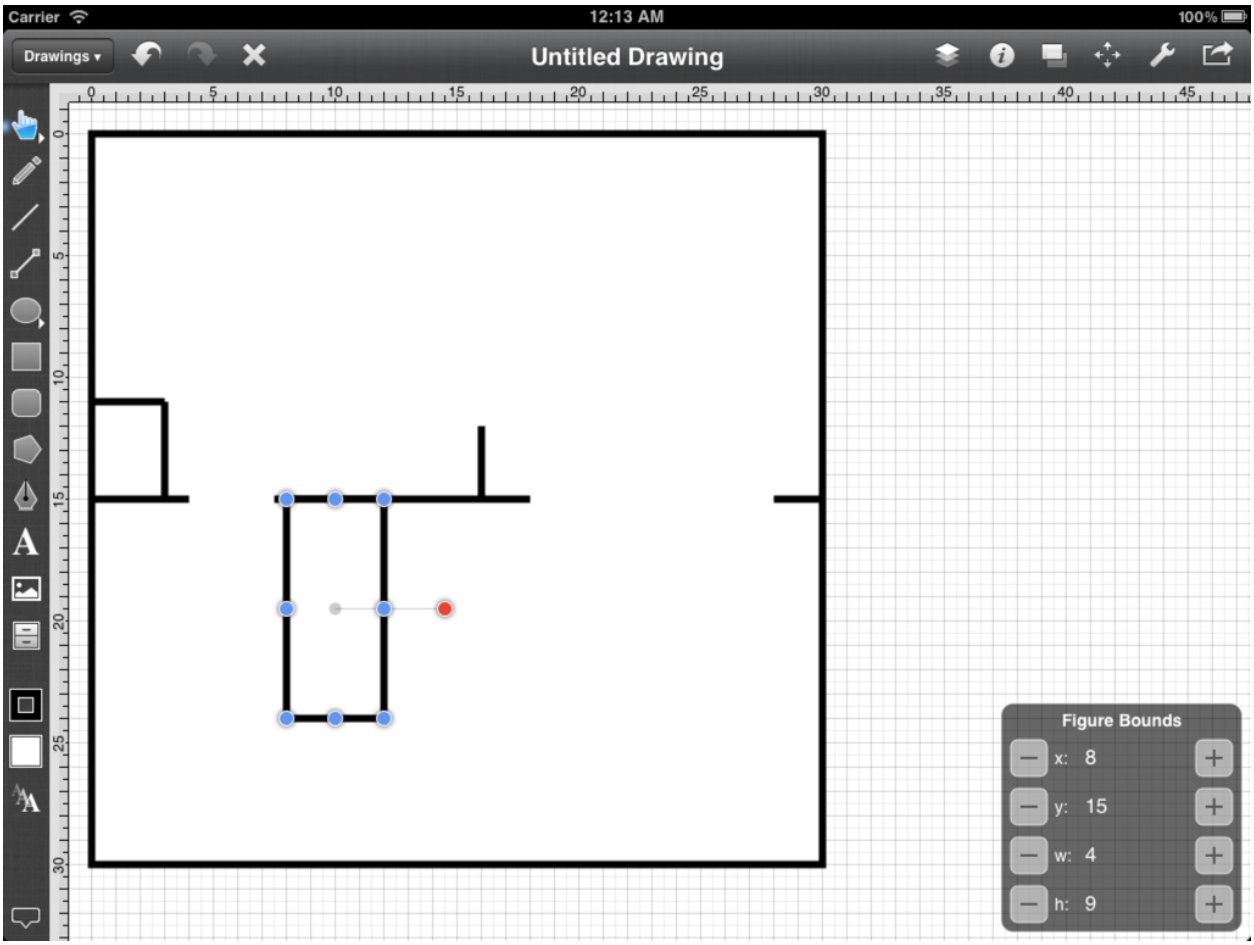

Carrier
12:08 AM
100%
Drawings
Untitled Drawing
Line Angle & Length
a: 0
l: 3
Line Endpoints
x1: 0
y1: 11
x2: 3
y2: 11



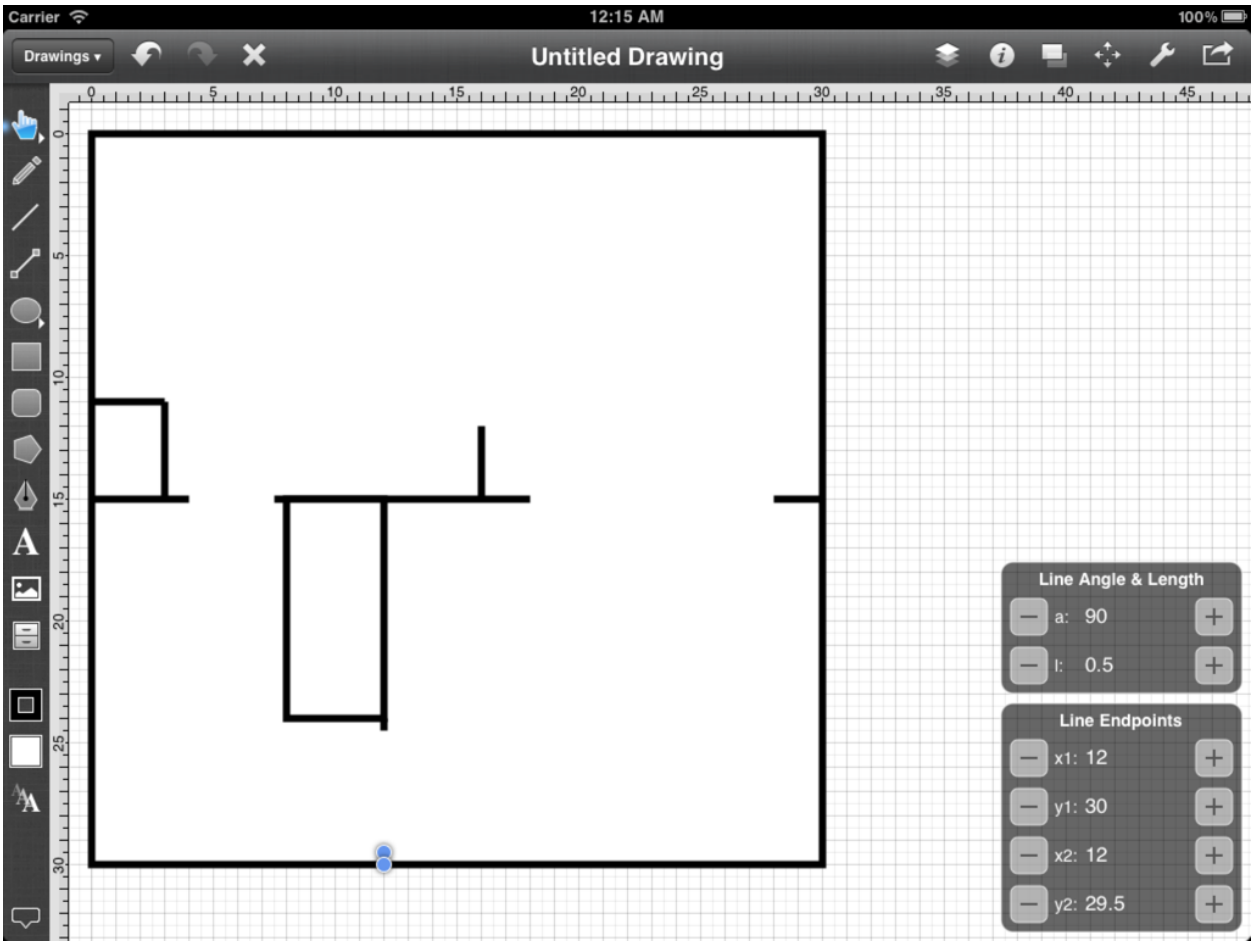
Next, draw the wall to the right of the refridgerator.



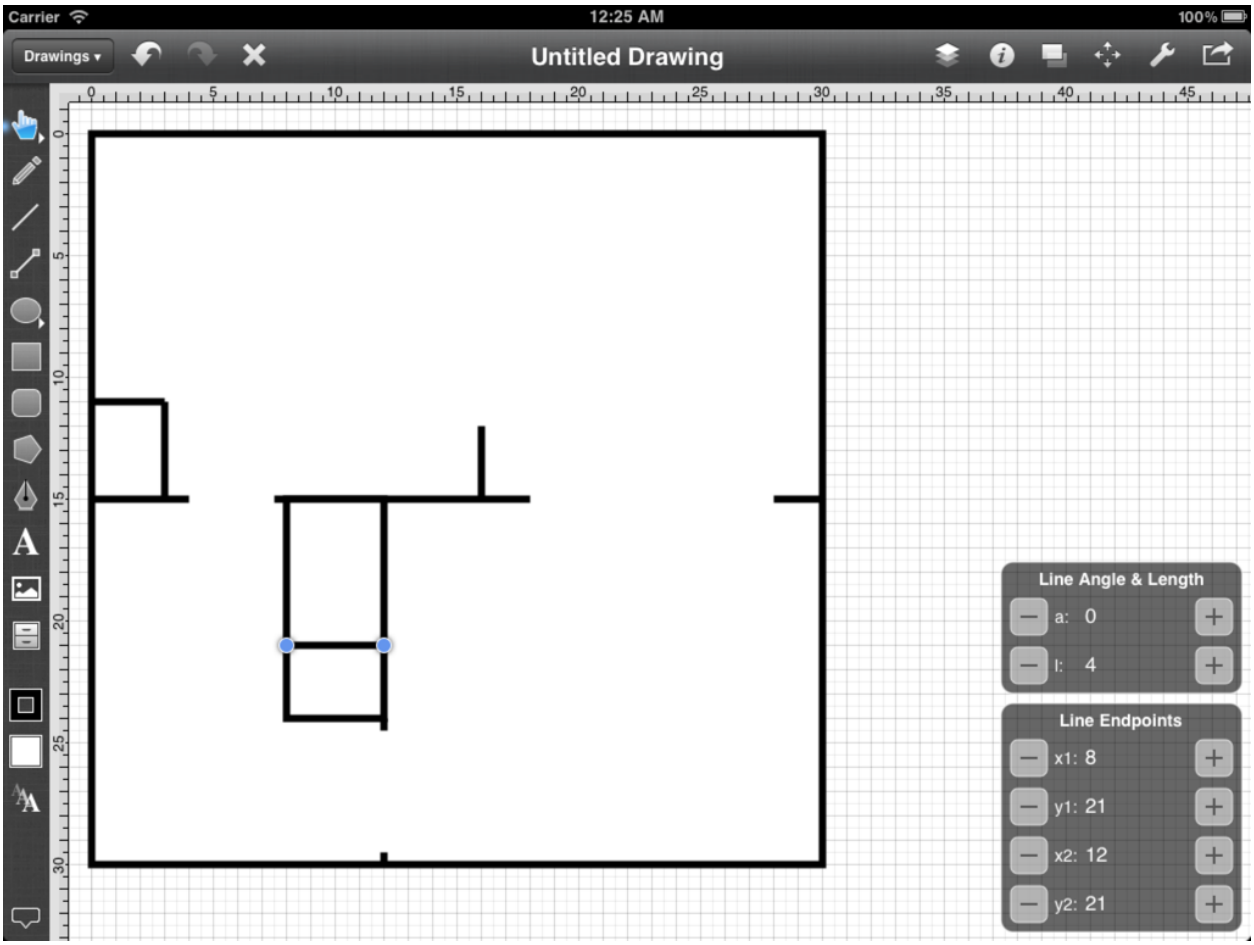
Use the Rectangle Tool to draw the outline of the front closet and the half bath. (Note, by looking at the dimensions above, we can figure out that this rectangle should be 4ft x 9 ft)



Next, draw the two 6 in walls between the foyer and the living room.



Lastly, create the wall between the front closet and the half bath.

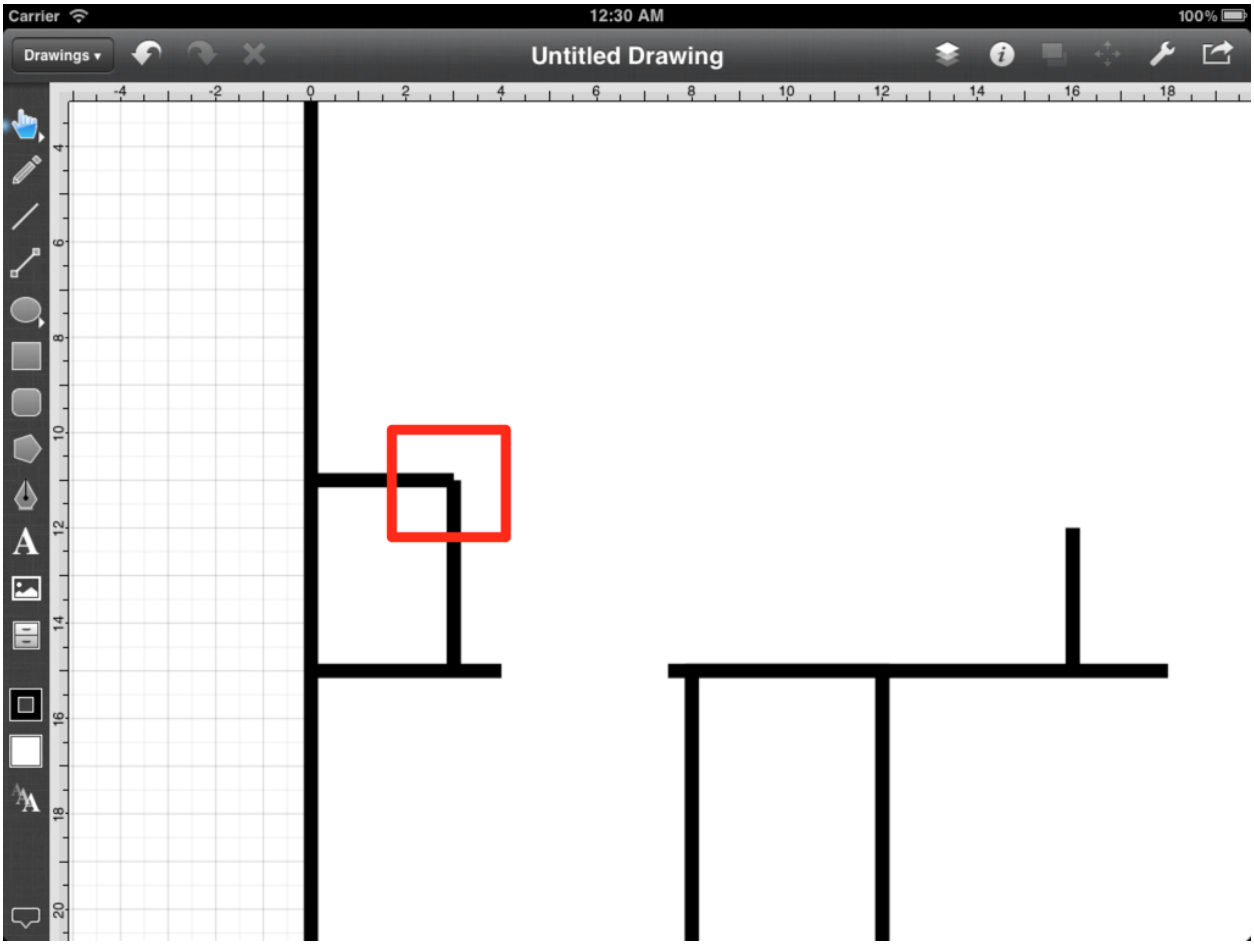


Now all of the lines representing the interior walls have been created.

Continue to Next Step

10. Step 9 - Interior Wall Cleanup

Upon zooming in on the kitchen closet, you'll notice that while the two endpoints of the lines touch, they do not make a nice squared off corner. This is because each line is an individual object.

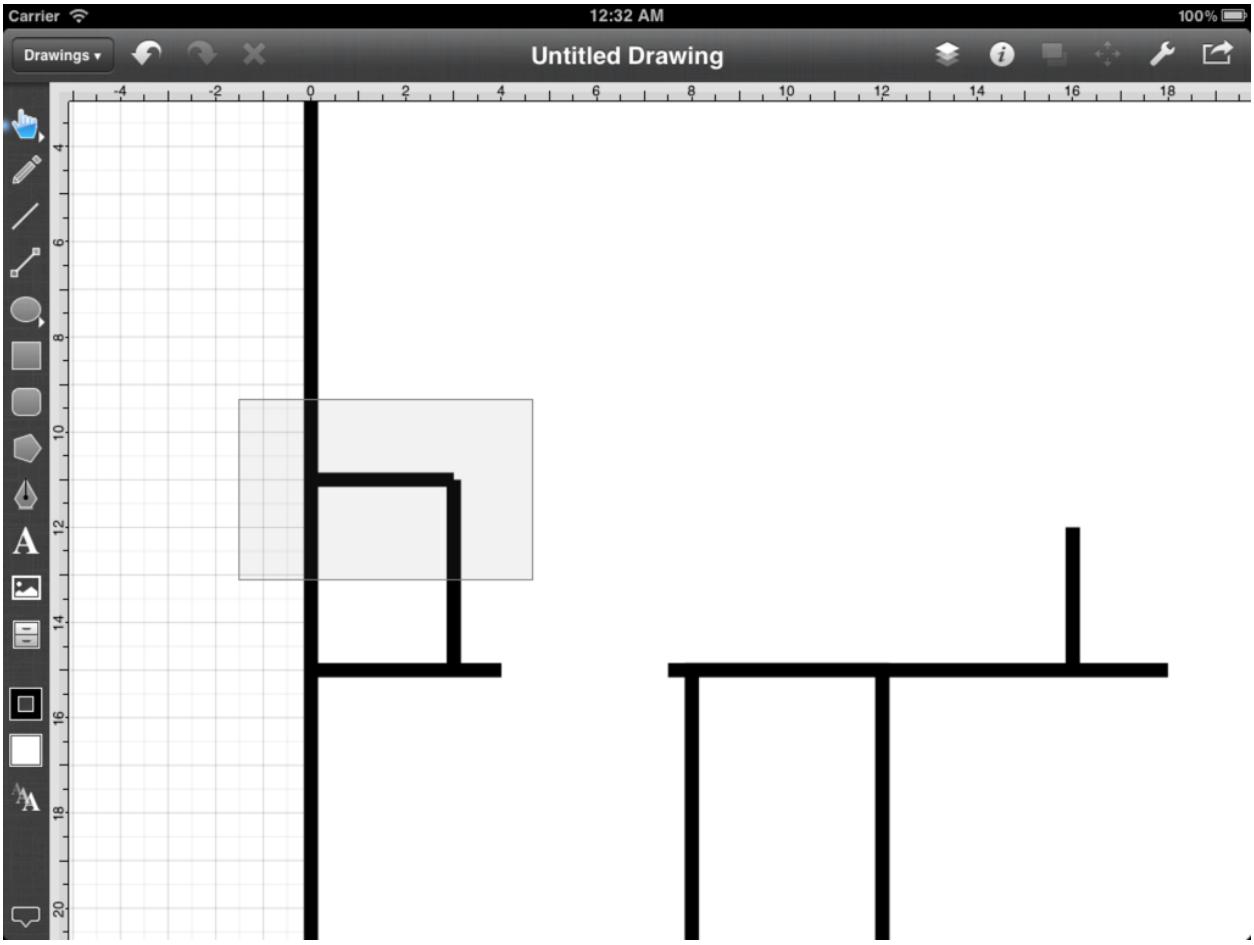


It is easy to remedy this within TouchDraw and can be fixed by combining the lines to create a single compound path.

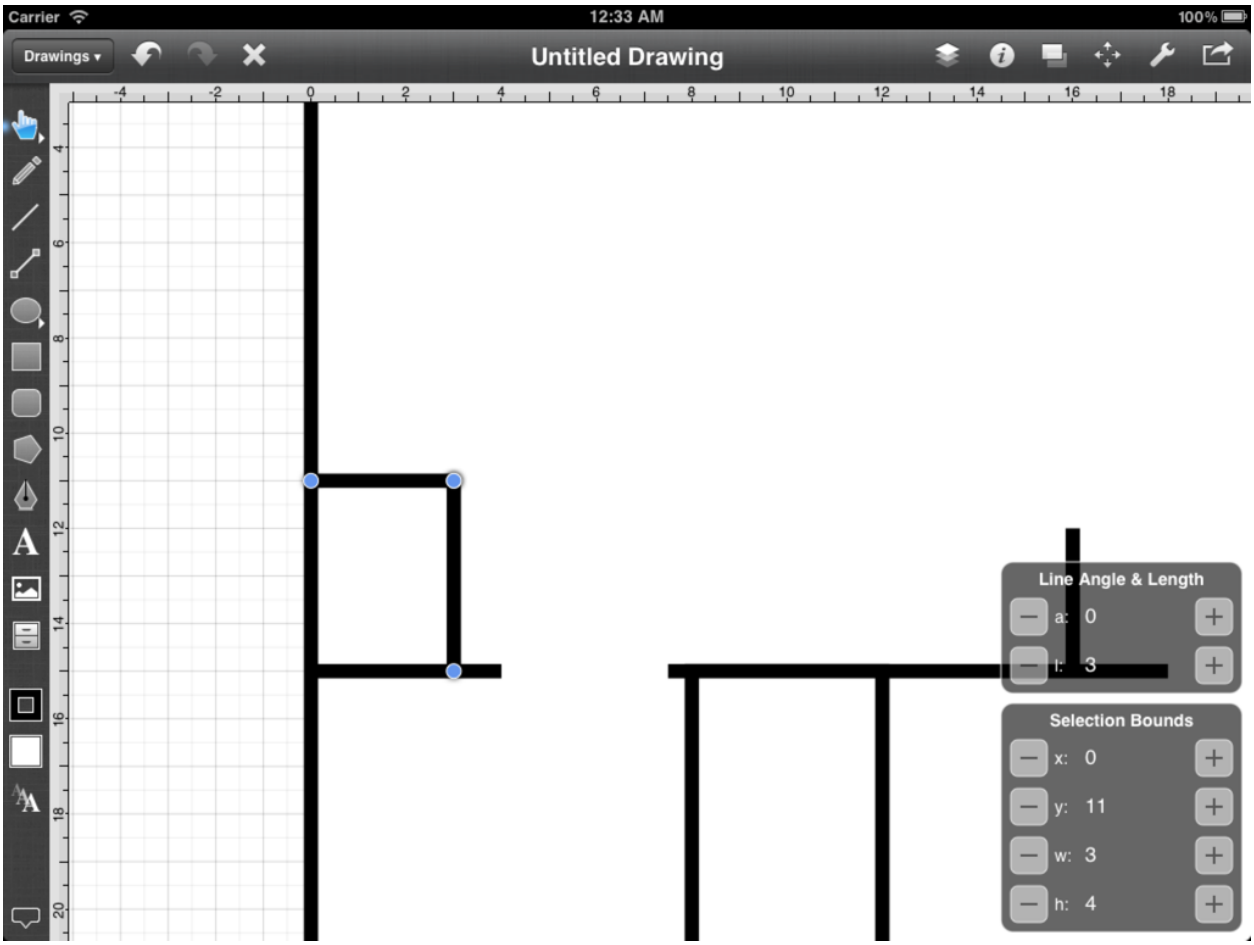
First, select both lines by drawing a selection rectangle that intersects with both lines as done previously. This is the easiest way to select multiple shapes within the TouchDraw application.

Note: As of TouchDraw 1.8.3, if the selection rectangle is drawn from left to right, any object that **intersects** with the selection rectangle will be selected. If the selection rectangle is drawn from right to left, then any

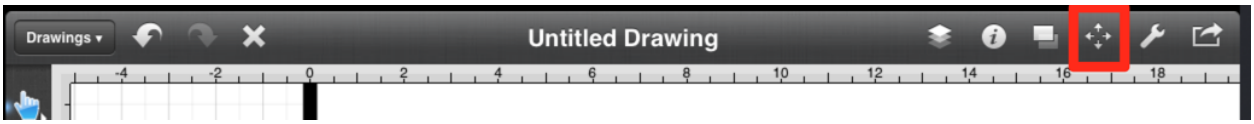
object that is **contained within** the selection rectangle will be selected.



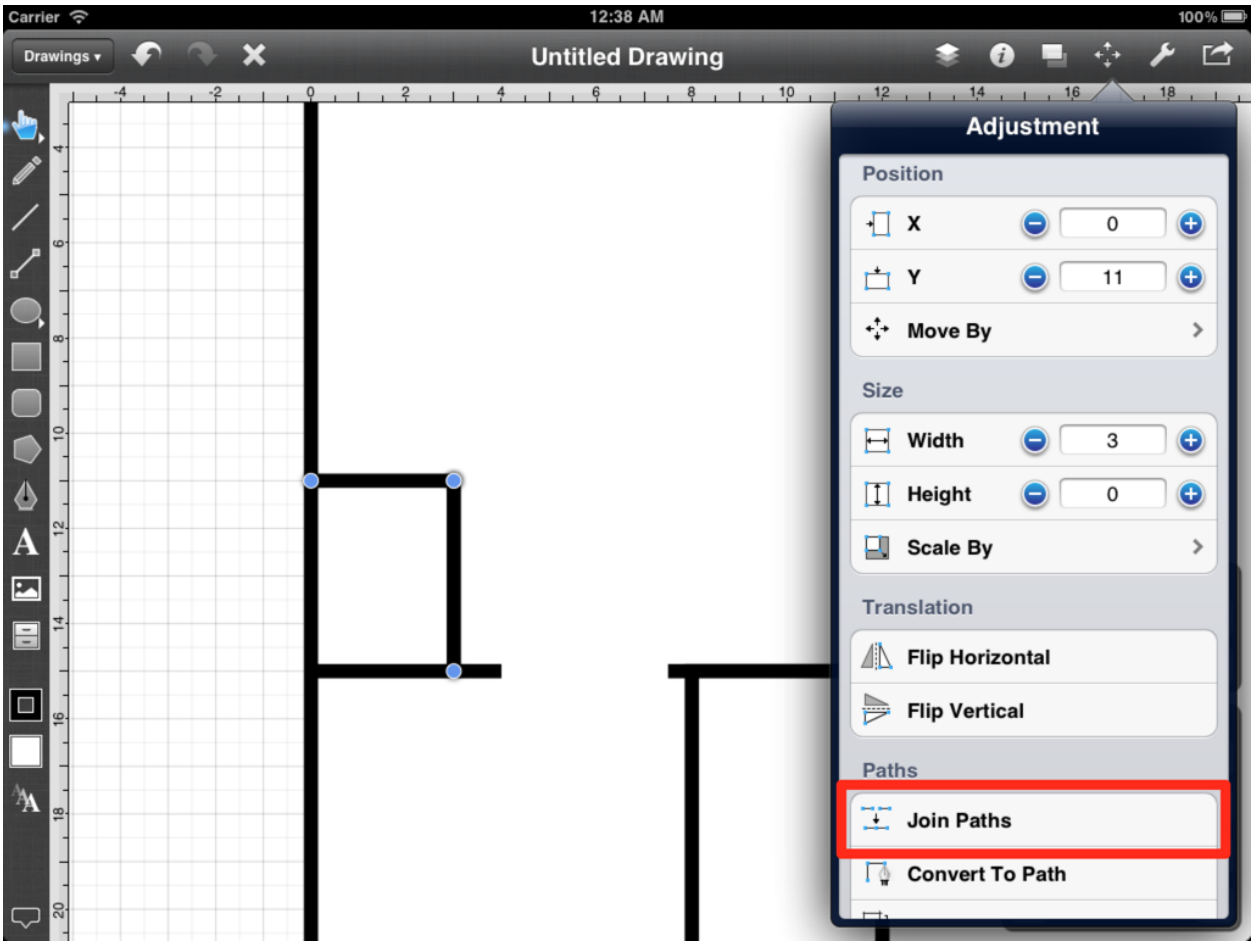
This action will cause both lines to be selected.



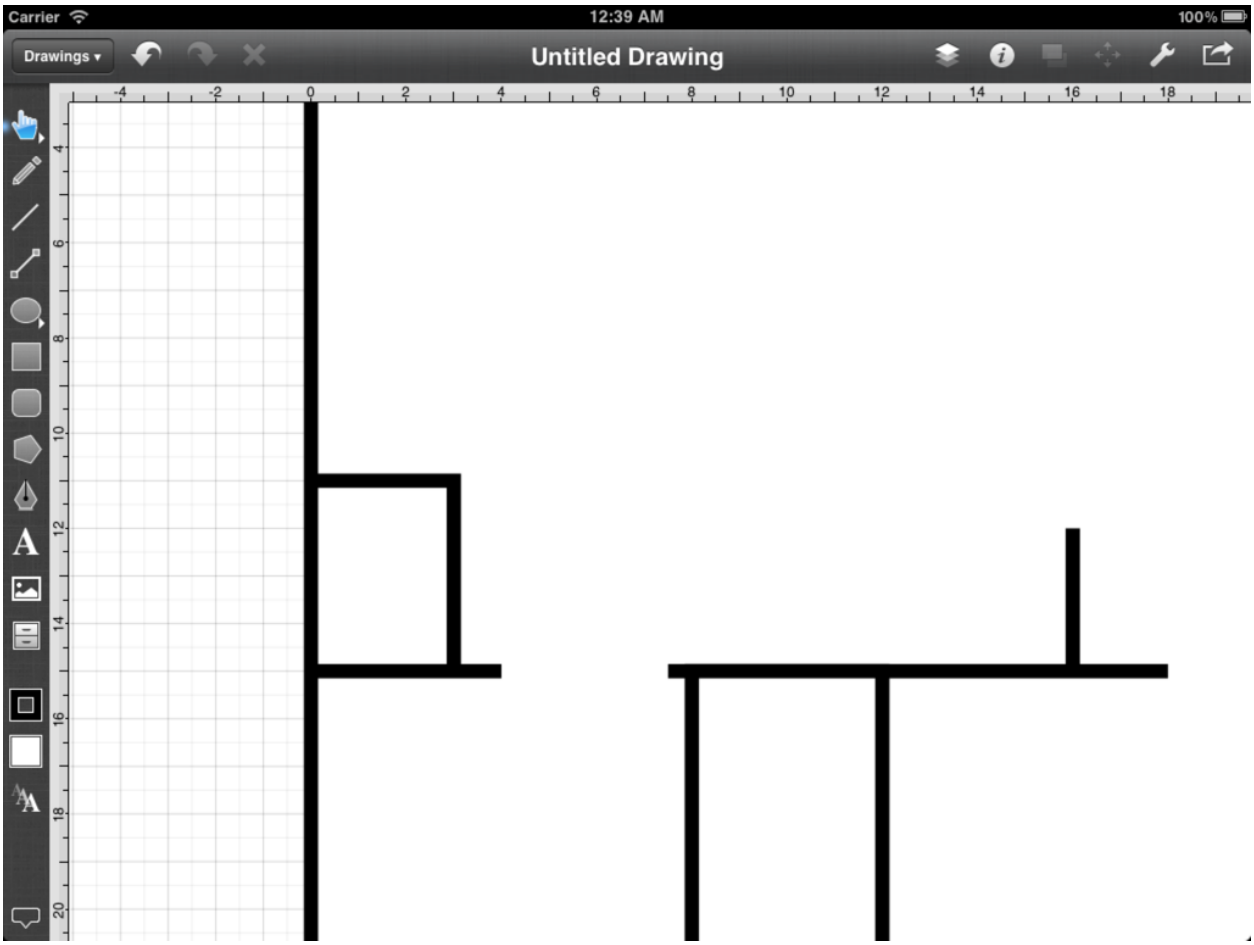
Next, open the Adjustment Menu to combine both of the lines into a single compound path.



After the **Adjustment Menu** opens, tap on the **Join Paths** option:



After executing the **Join Paths** command and deselecting the newly created compound path, you'll see that the corner of the closet is now perfect.



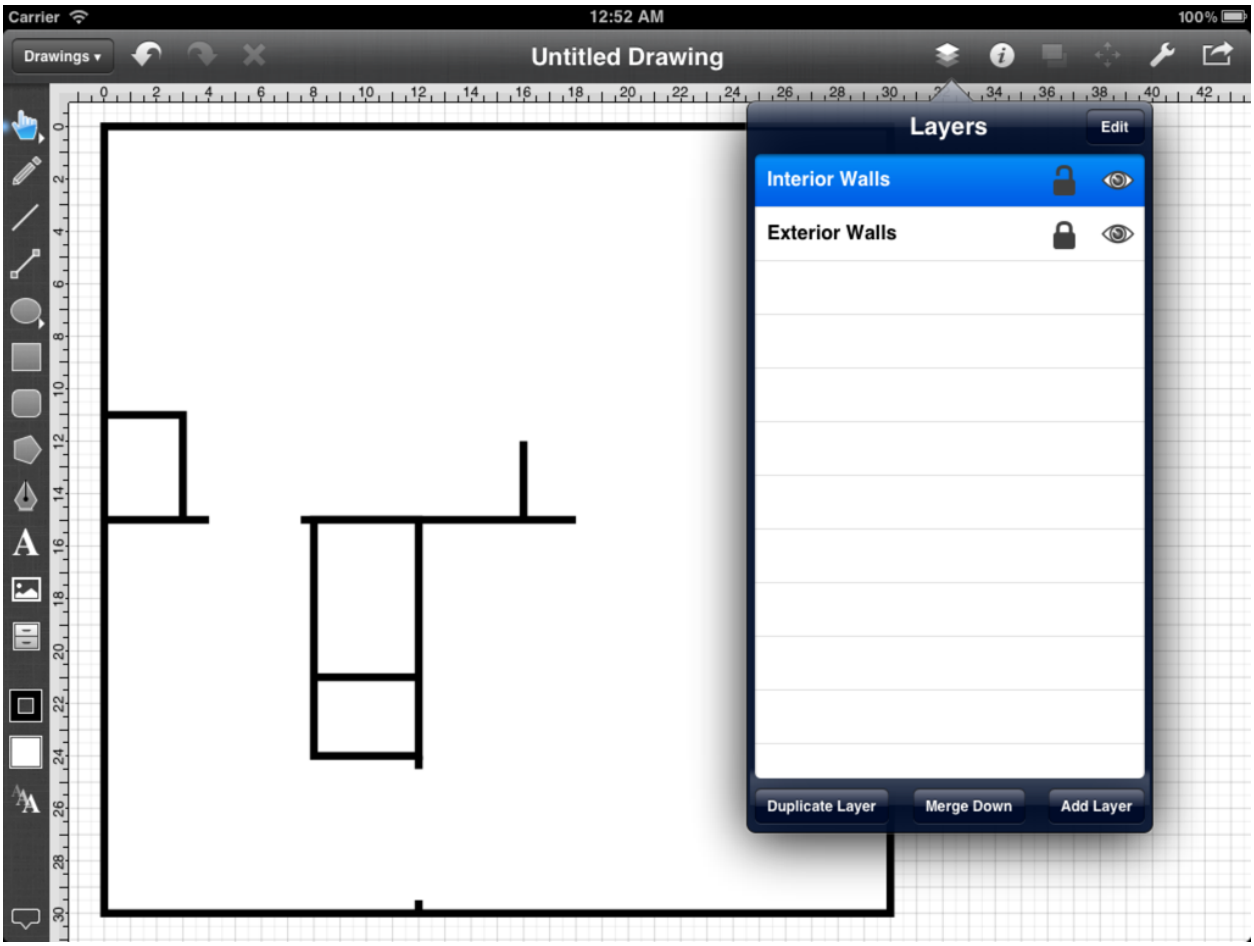
Continue to Next Step

11. Step 10 - Adding Door Cutouts Layer

The next step in this proces is to create a new layer for the **Door Cutouts**.

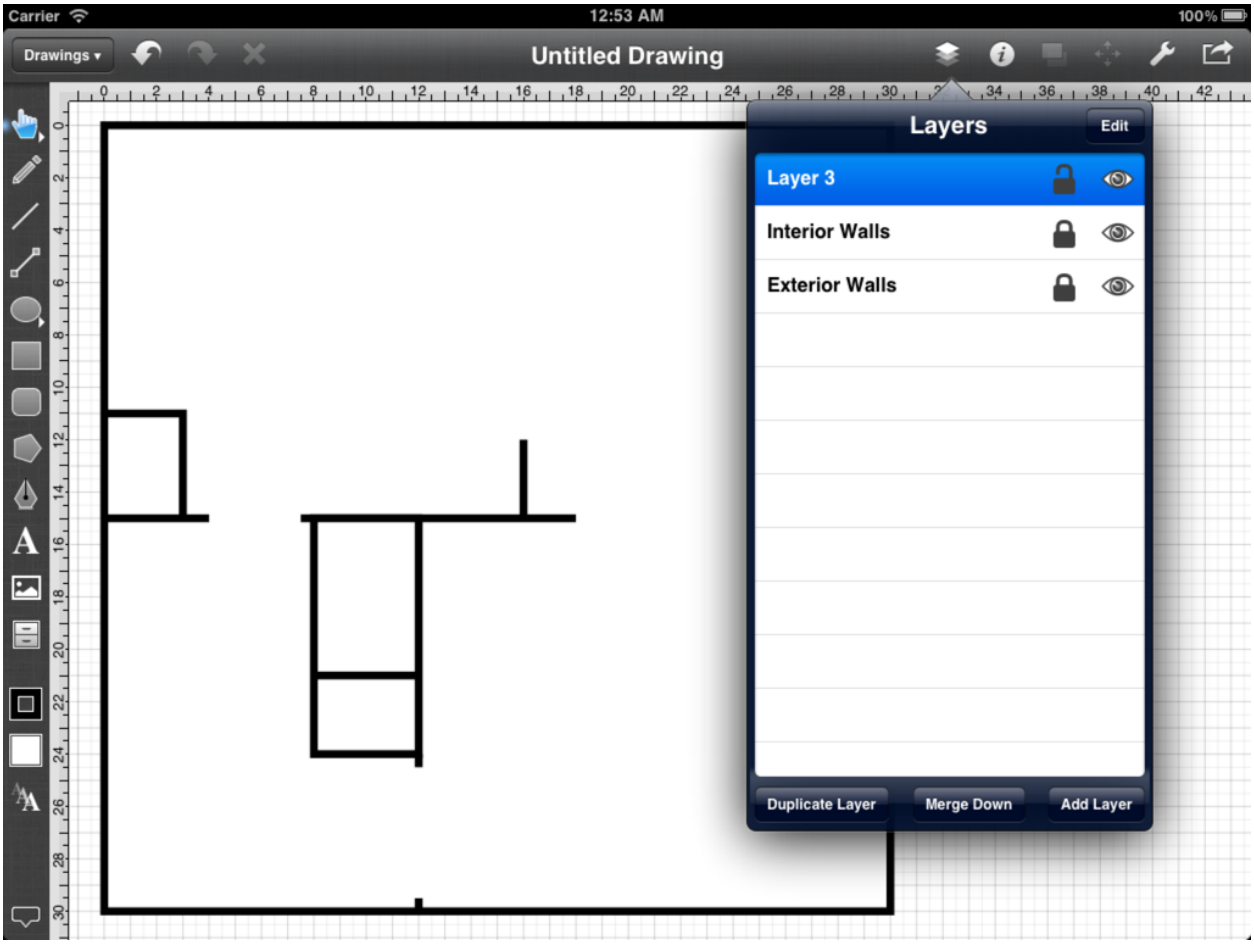
As with the previous step where a new layer was added for the Interior Walls, the same process must be followed to create a layer for the **Door Cutouts**.

First, open the Layers Menu.

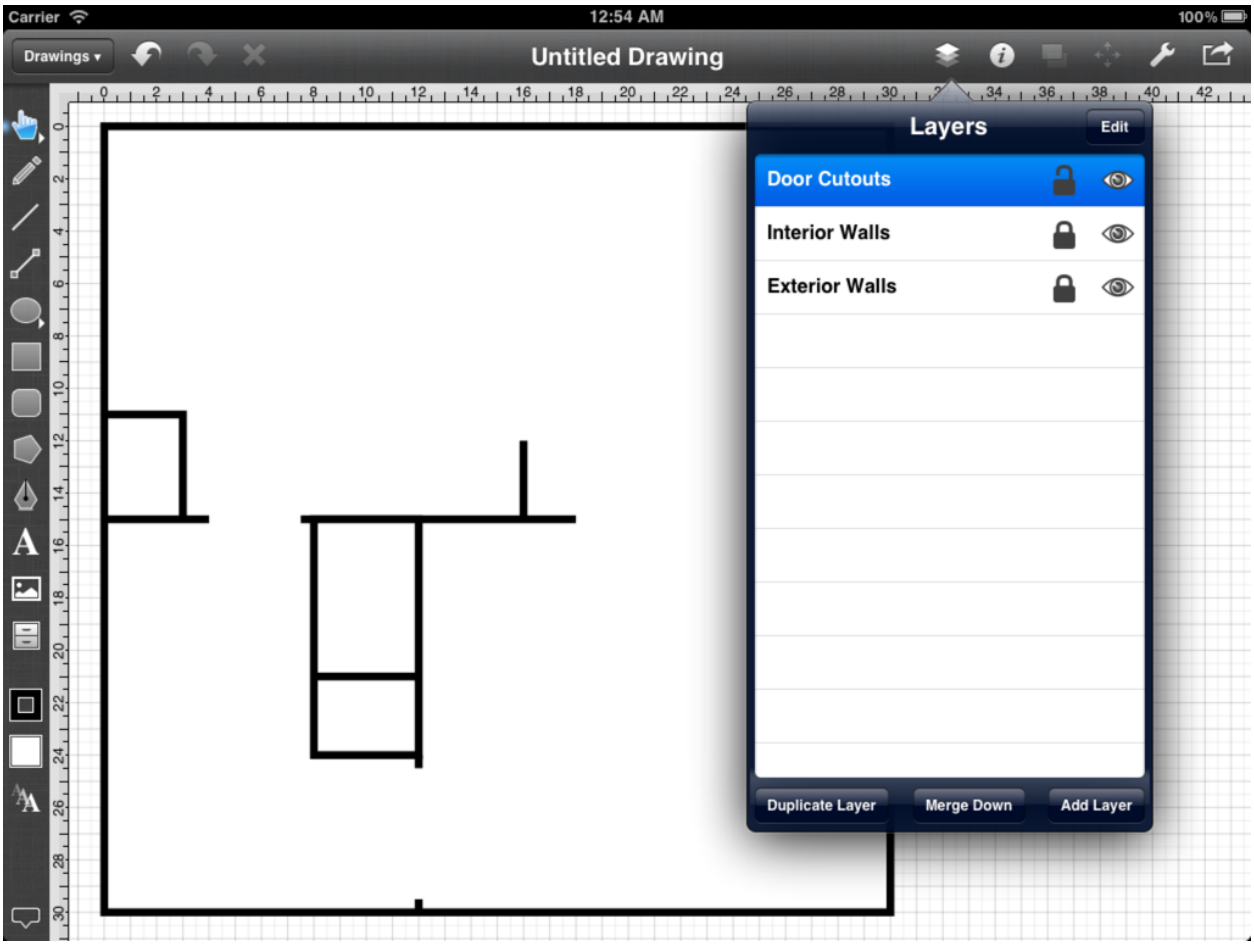


Second, lock the **Interior Walls** layer since no additional changes will need to be made.

Third, press on the **Add Layer Button** to create a new layer.



Fourth, as before, press on the **Edit Button** and rename *Layer 3* to **Door Cutouts**.



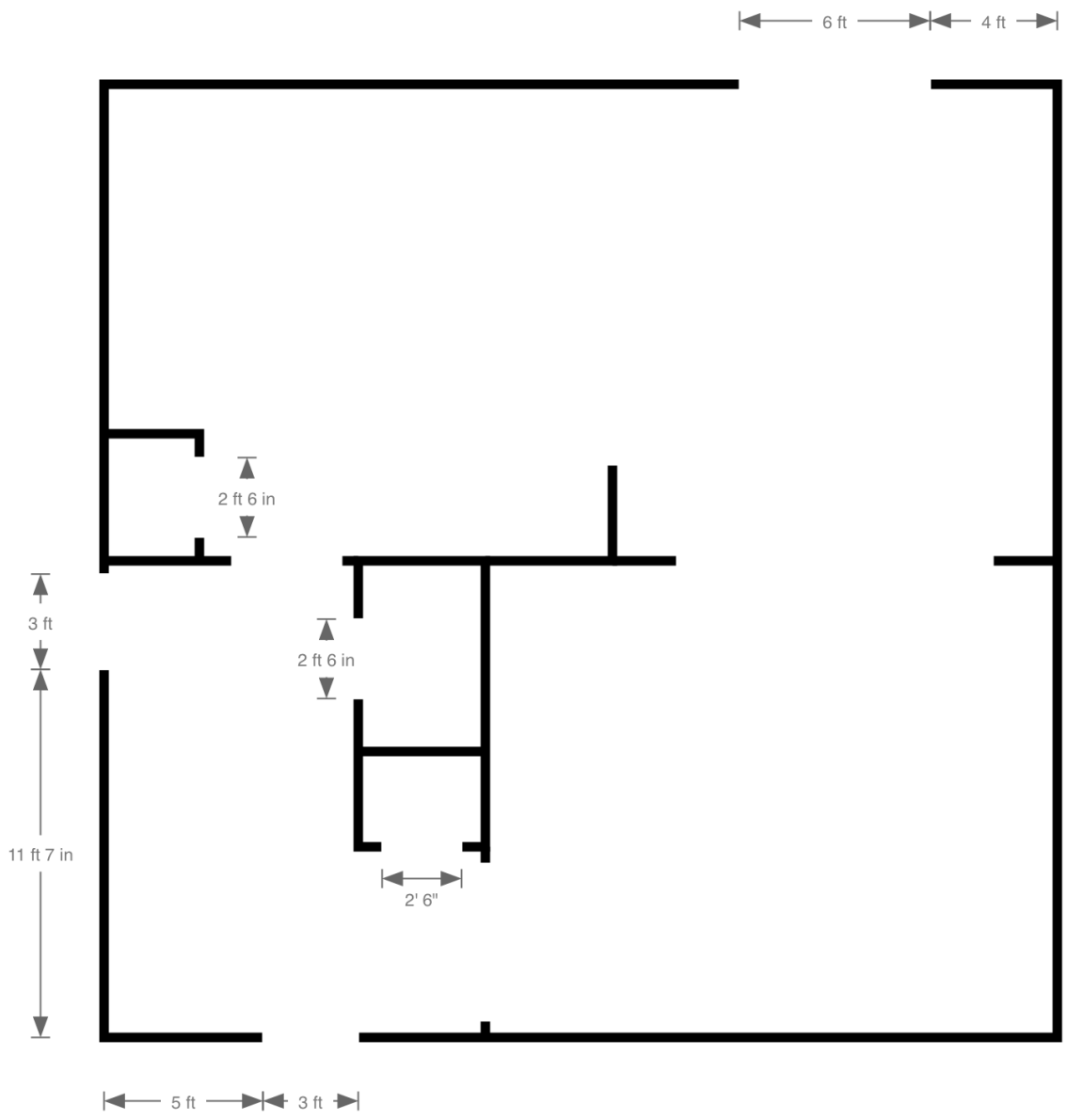
Lastly, make sure that the **Door Cutouts** layer is selected and then dismiss the **Layers Menu** by tapping outside of it.

Continue to Next Step

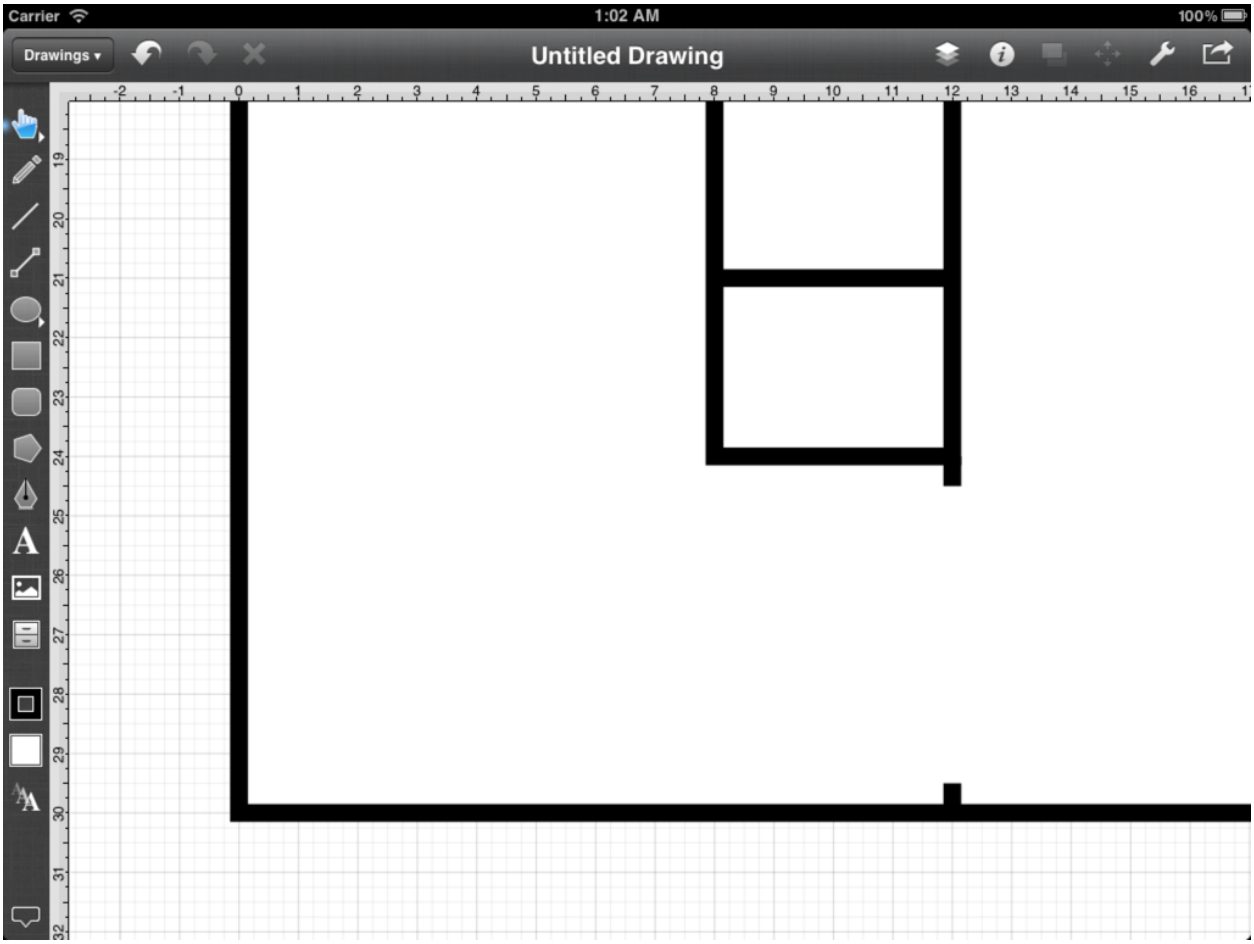
12. Step 11 - Create Door Cutouts

The next step is to create the cutouts where the doors will go. The cutouts are nothing more than white filled rectangles that cover the wall where the doors go and are added to make the walls invisible in that location.

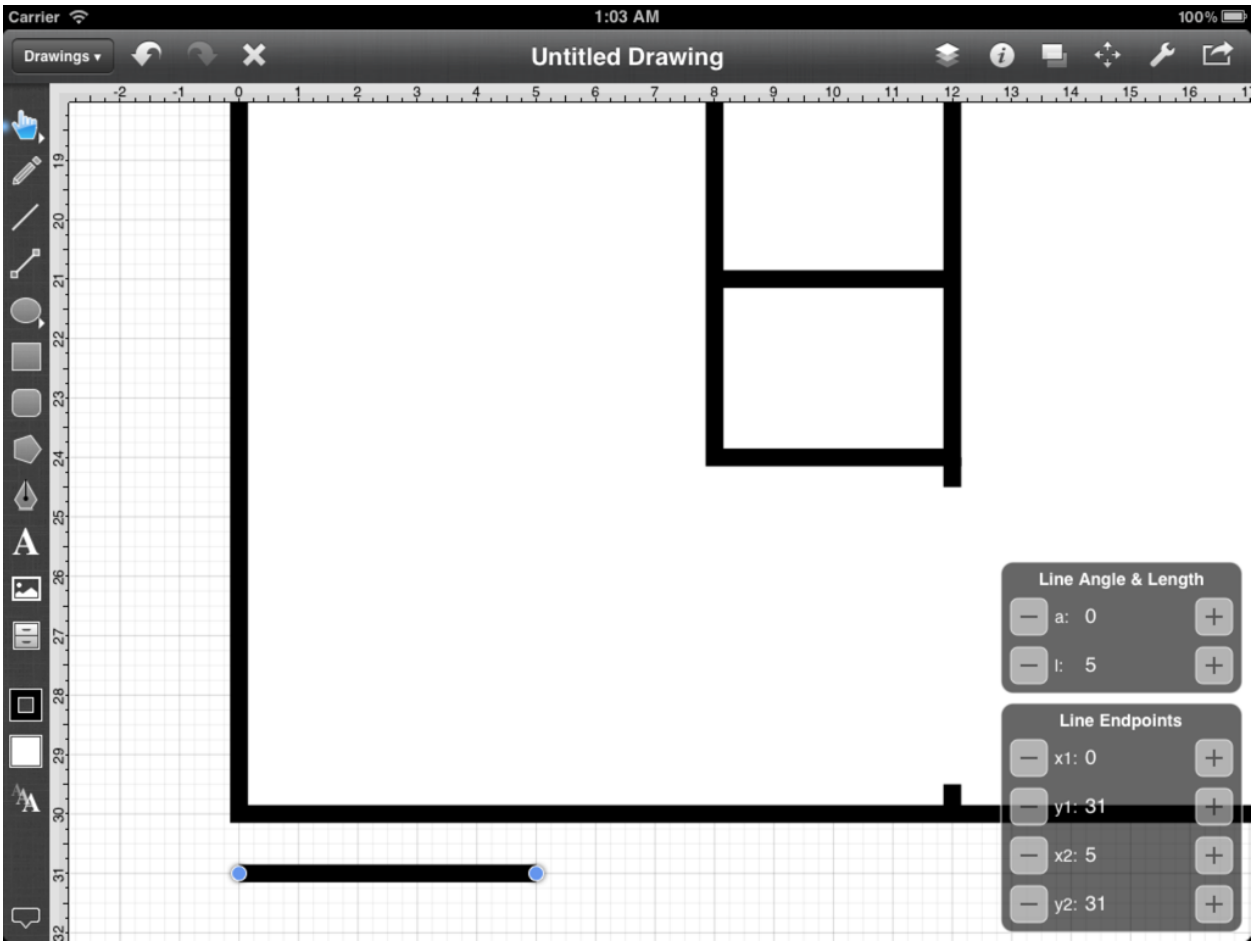
We created the following diagram (also done as an additional layer within the TouchDraw drawing) in order to provide a guide as to where the cutouts should be placed:



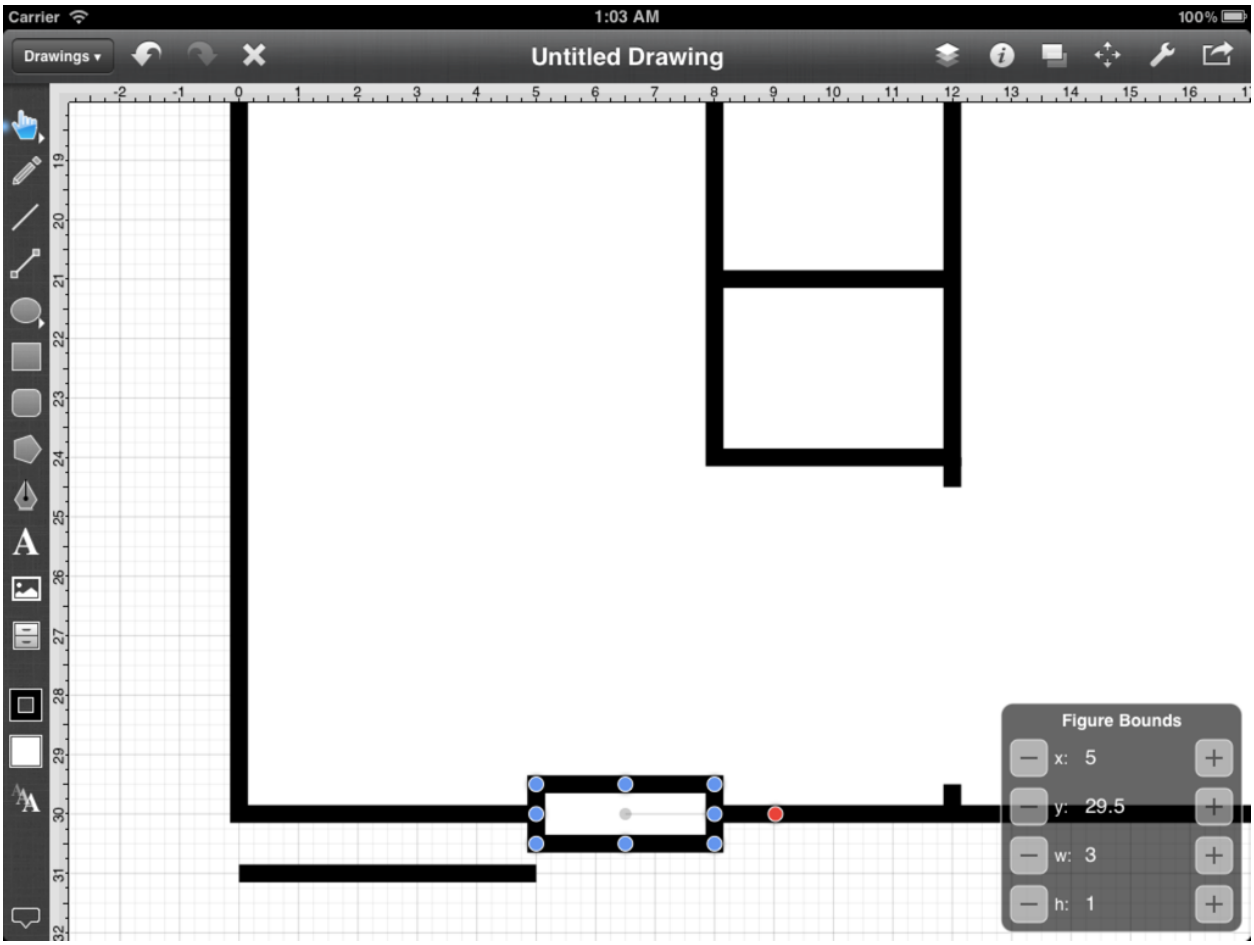
For this type of work, it is often best to zoom in on the area where the work will be performed. Zoom in on the front door and foyer closet portion of the drawing since the cutouts for these areas will be added first.



First, we know that the front door is 5 feet from the left, so we'll draw a temporary line as a point of reference.

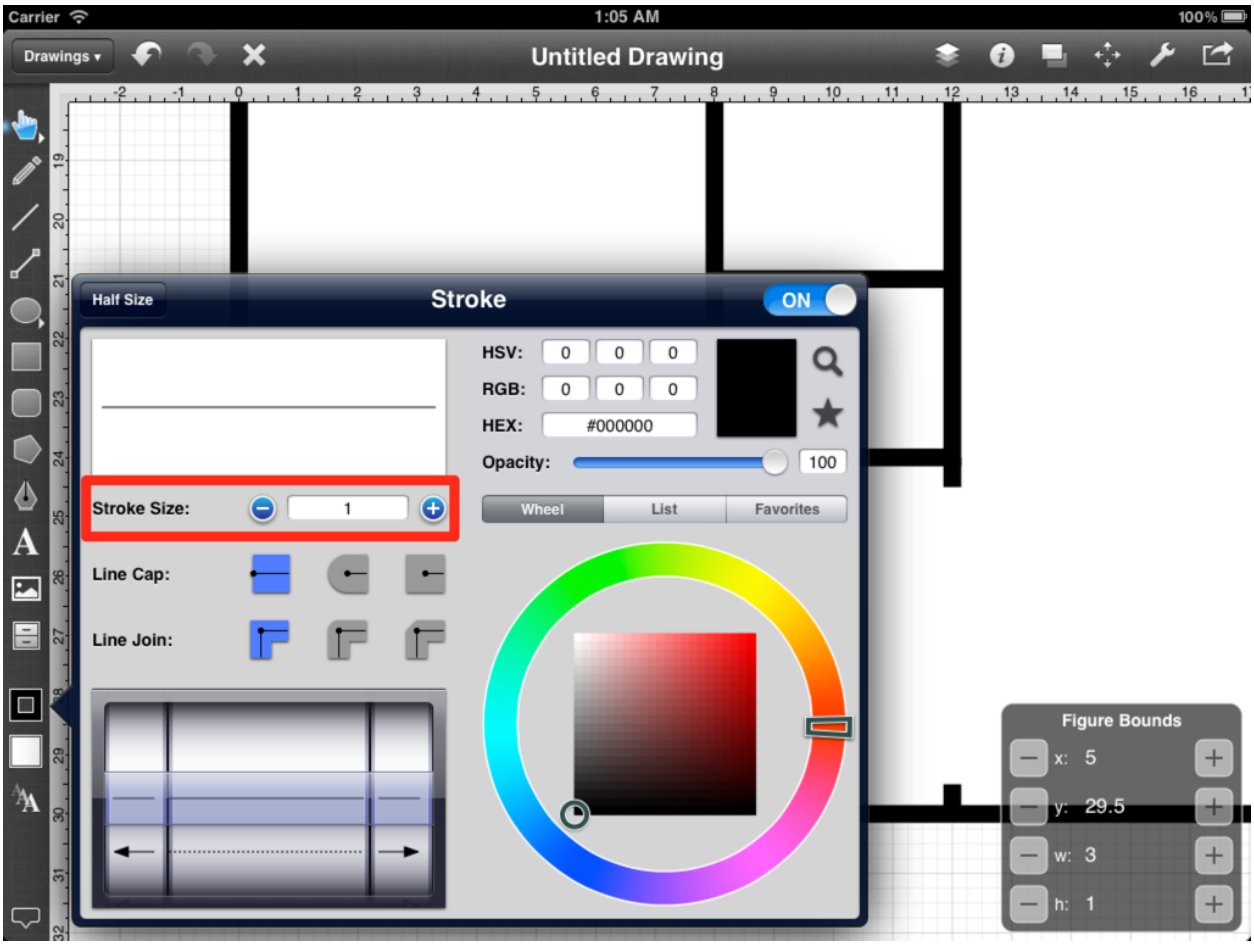


Next, use the Rectangle Tool to draw the cutout.

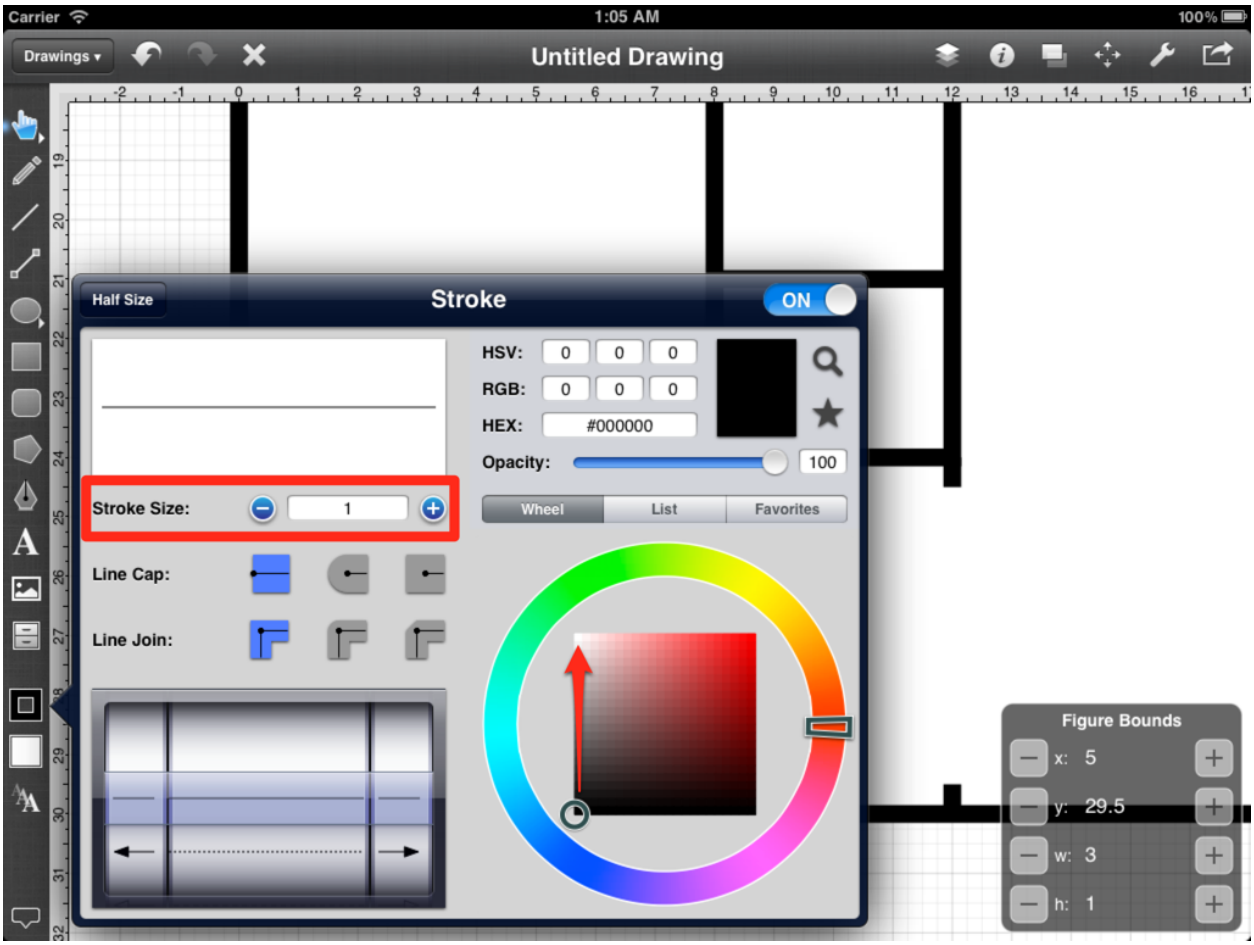


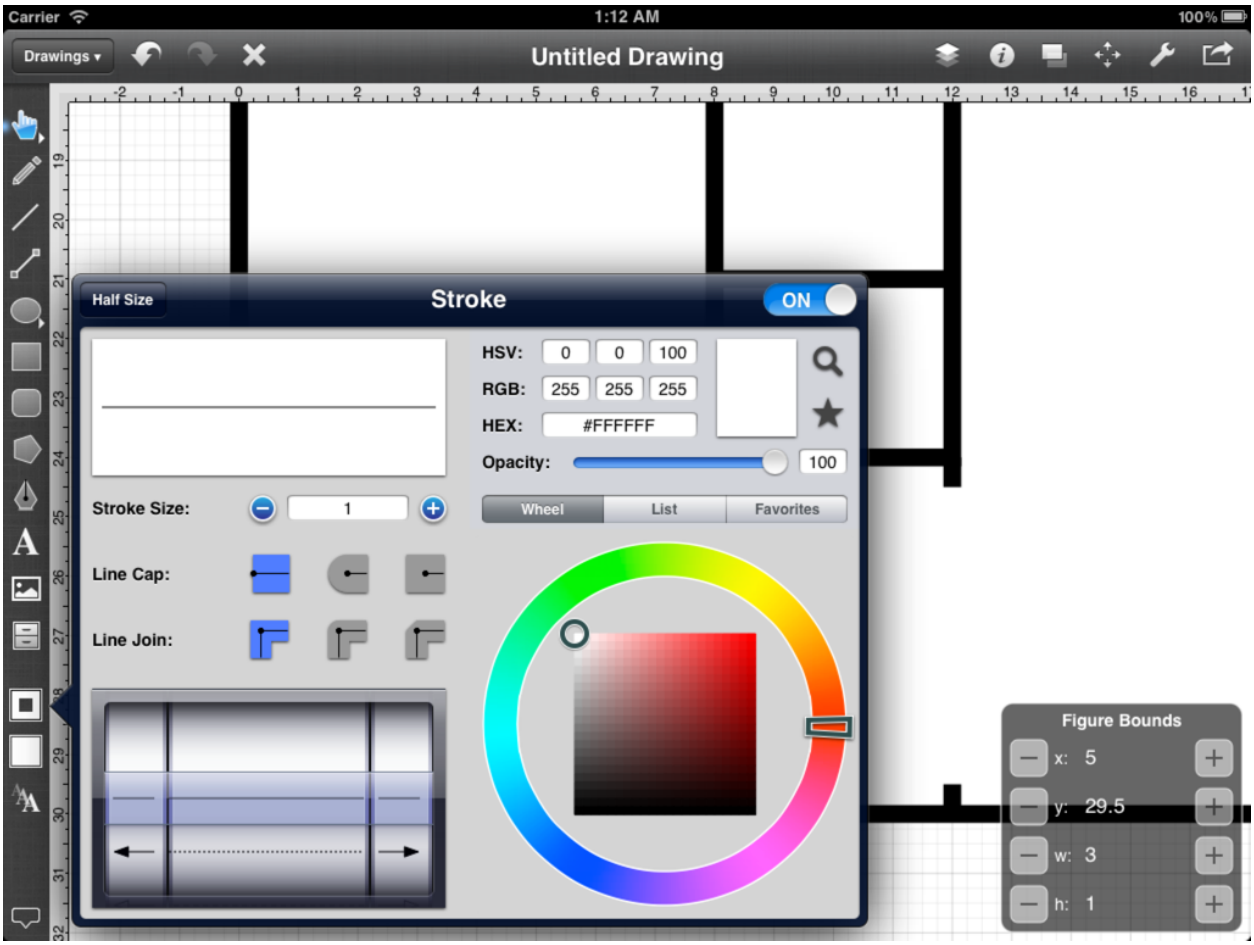
The rectangle was drawn with the current stroke setting (which was 6 points and black), so a few stroke attribute changes will be necessary before continuing.

First, bring up the Info Menu, tap on the **Stroke** option, and change the the Stroke Size from 6 to 1.

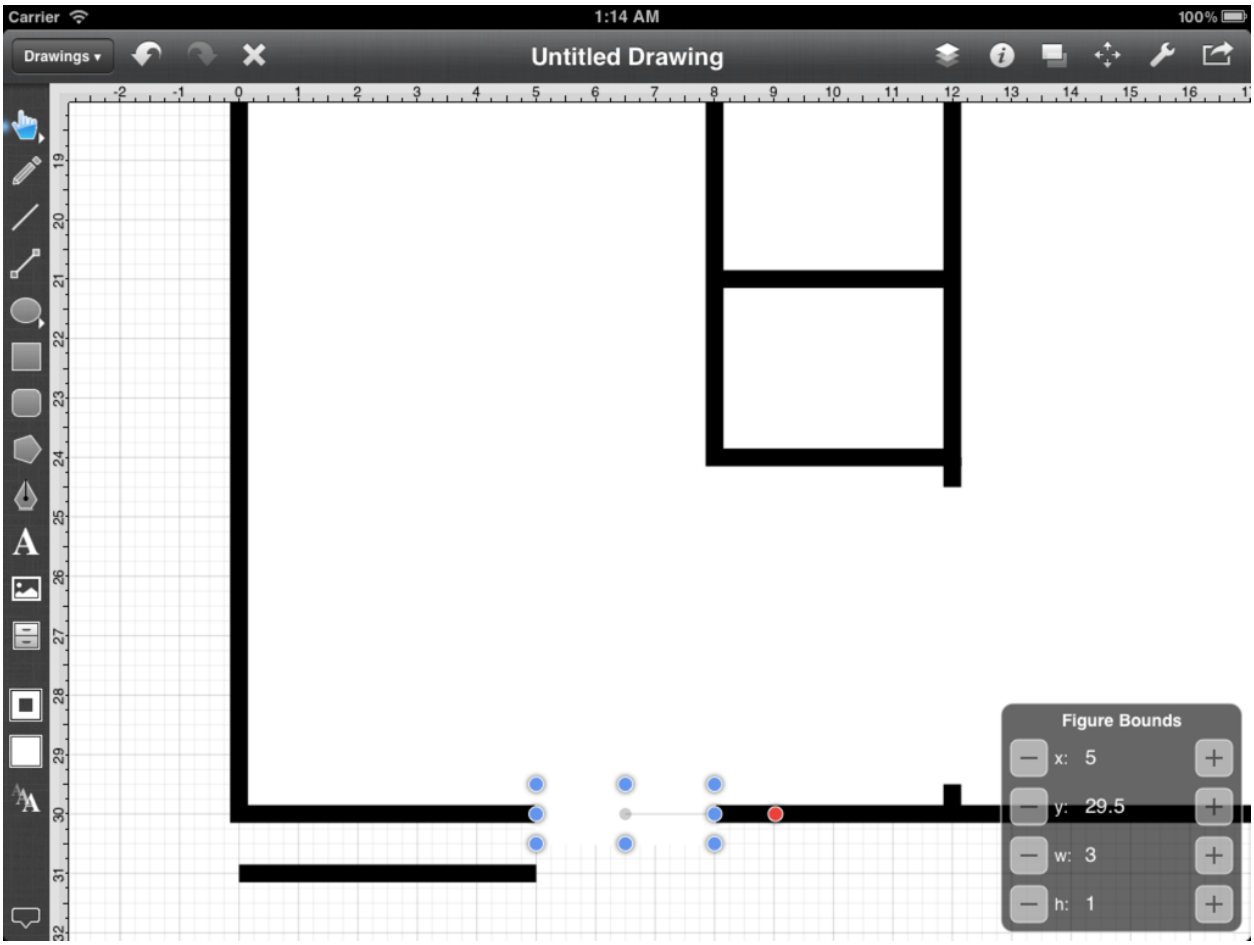


Next, change the stroke color to white. Grab the handle in the color square and then drag it to the upper left hand corner.

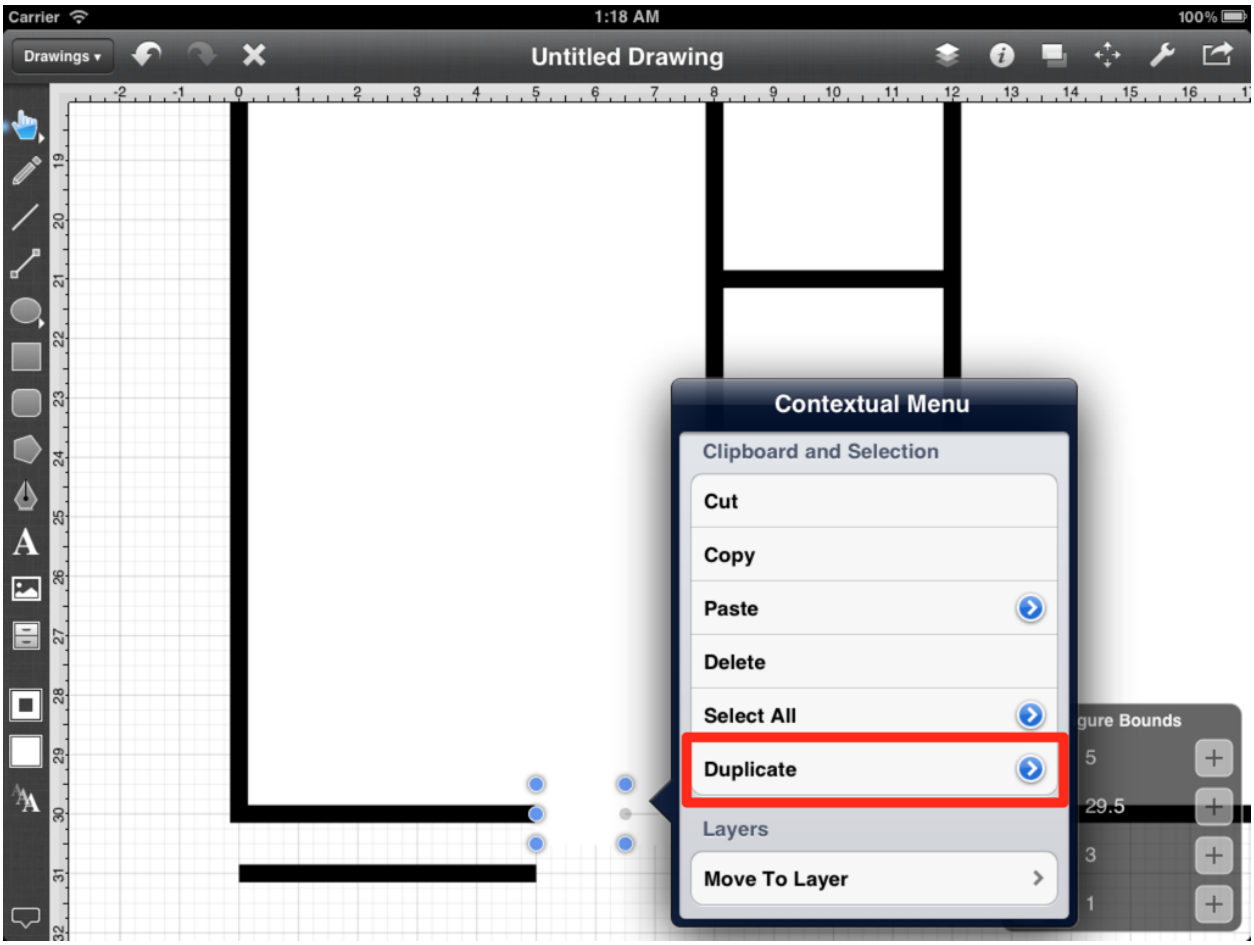

Carrier
1:05 AM
100%
Drawings
Untitled Drawing
Half Size
Stroke
ON
HSV:
RGB:
HEX:
#000000
Opacity:
100
Stroke Size:
1
Wheel
List
Favorites
Line Cap:
Line Join:
Figure Bounds
x: 5
y: 29.5
w: 3
h: 1



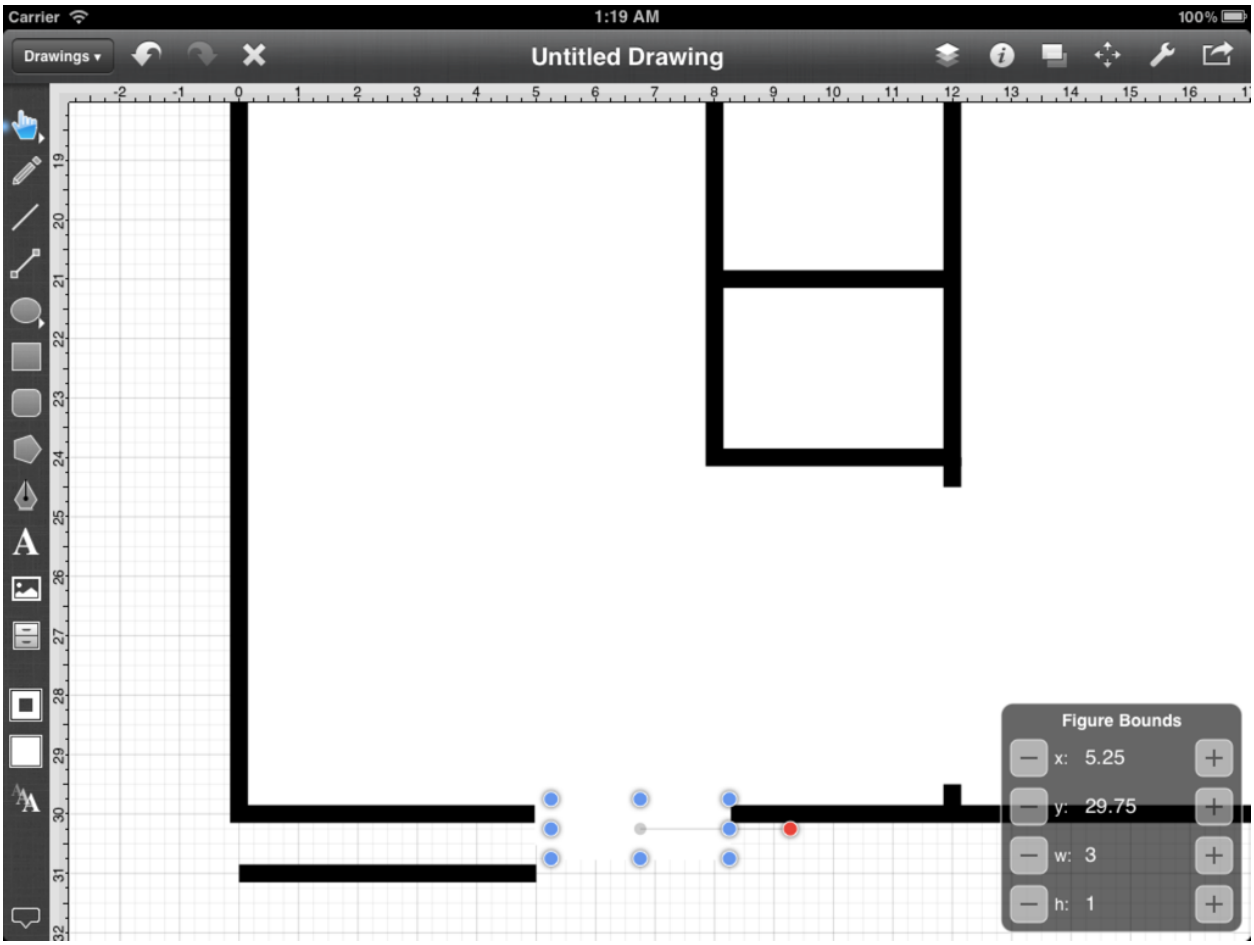
After dismissing the **Stroke Menu**, you'll see that our cutout is now styled correctly (with a white stroke and a white fill).



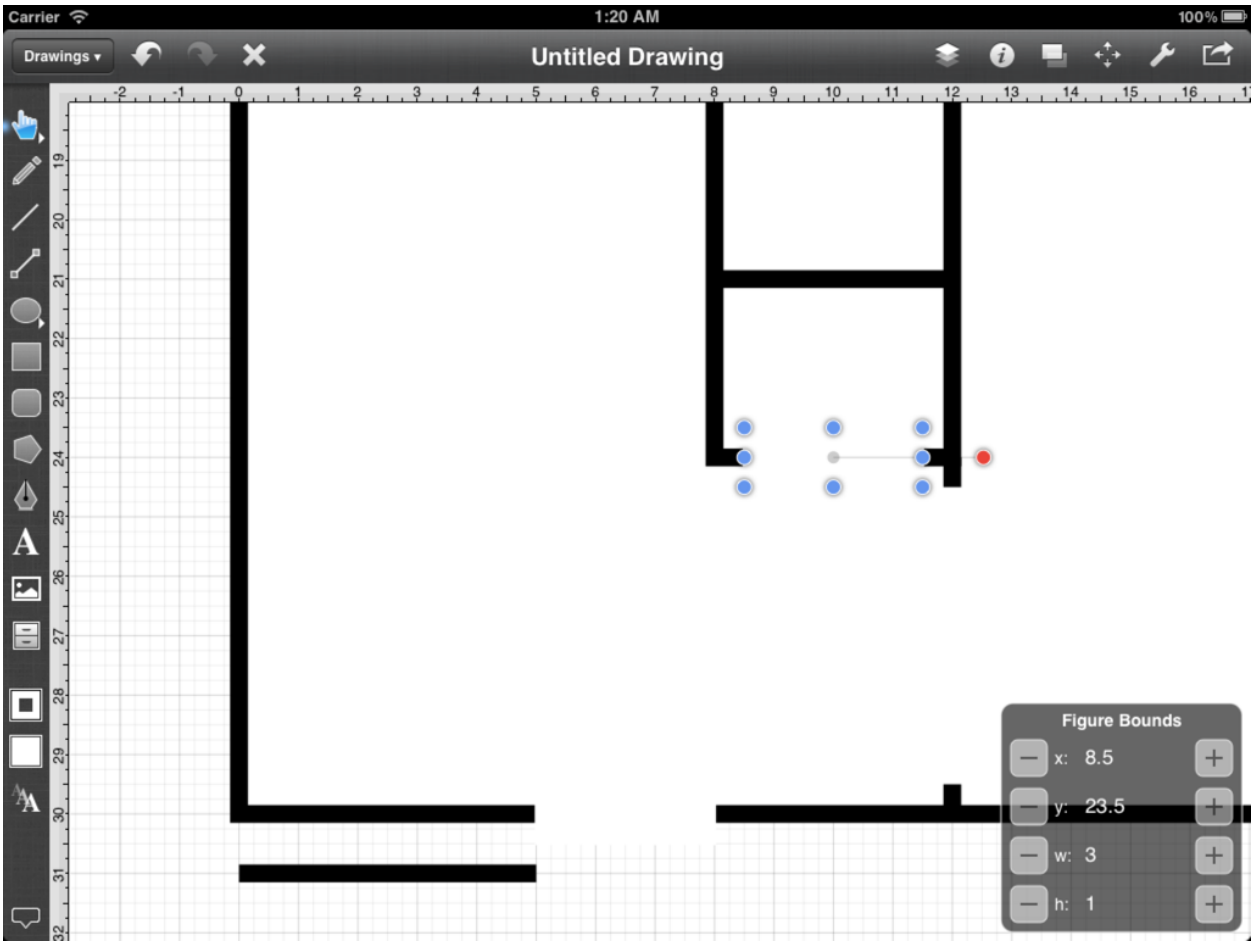
Next, duplicate the cutout and drag the copy to where the foyer closet door should go. To duplicate a shape, first make sure it is selected and then either touch and hold on the figure or press the **Contextual Menu Button** in the lower left hand corner of the screen to bring up the Contextual Menu.



This action will create a duplicate that is slightly offset from the original.

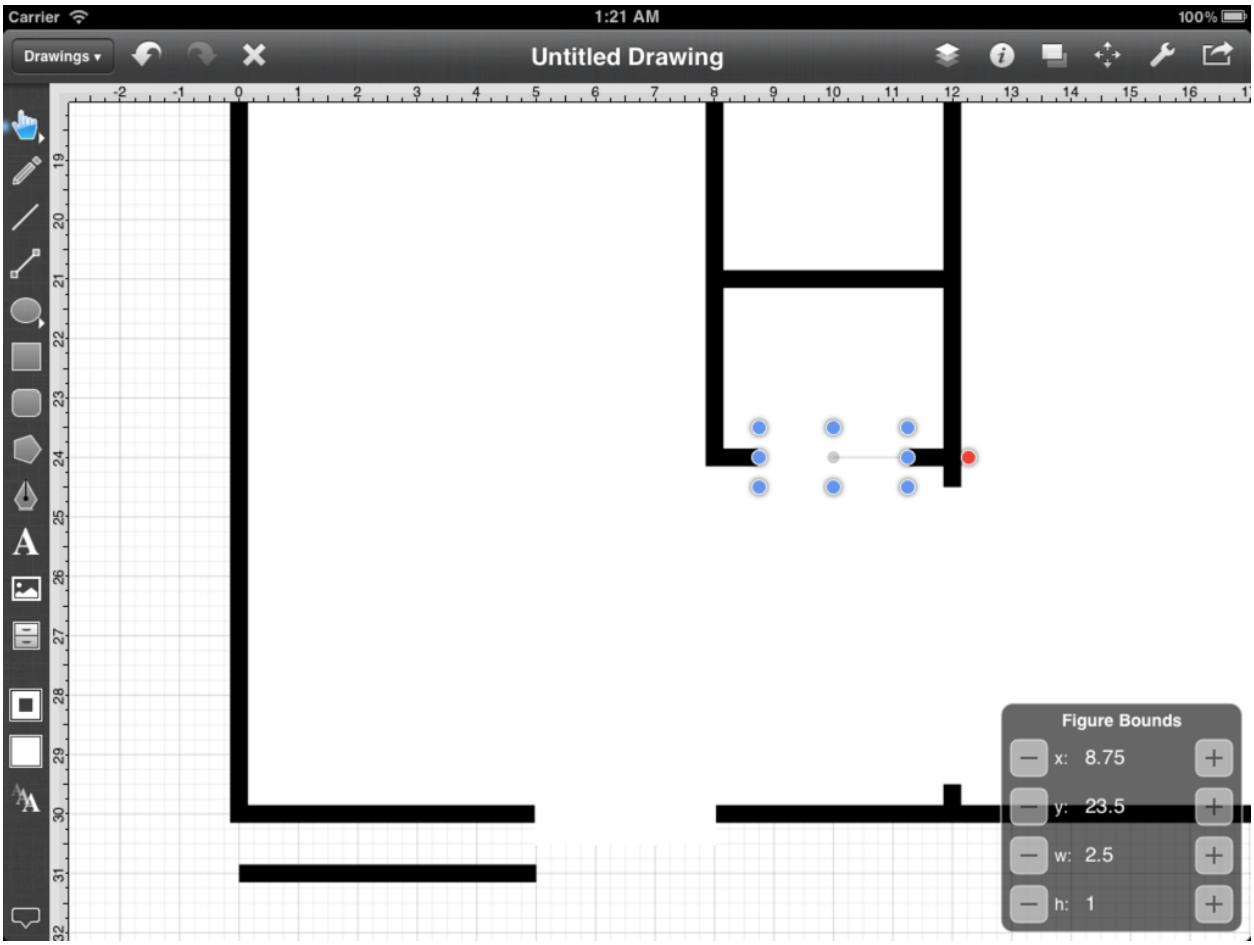


Then touch within the bounds of the copy and drag it to where the foyer closet door should go.

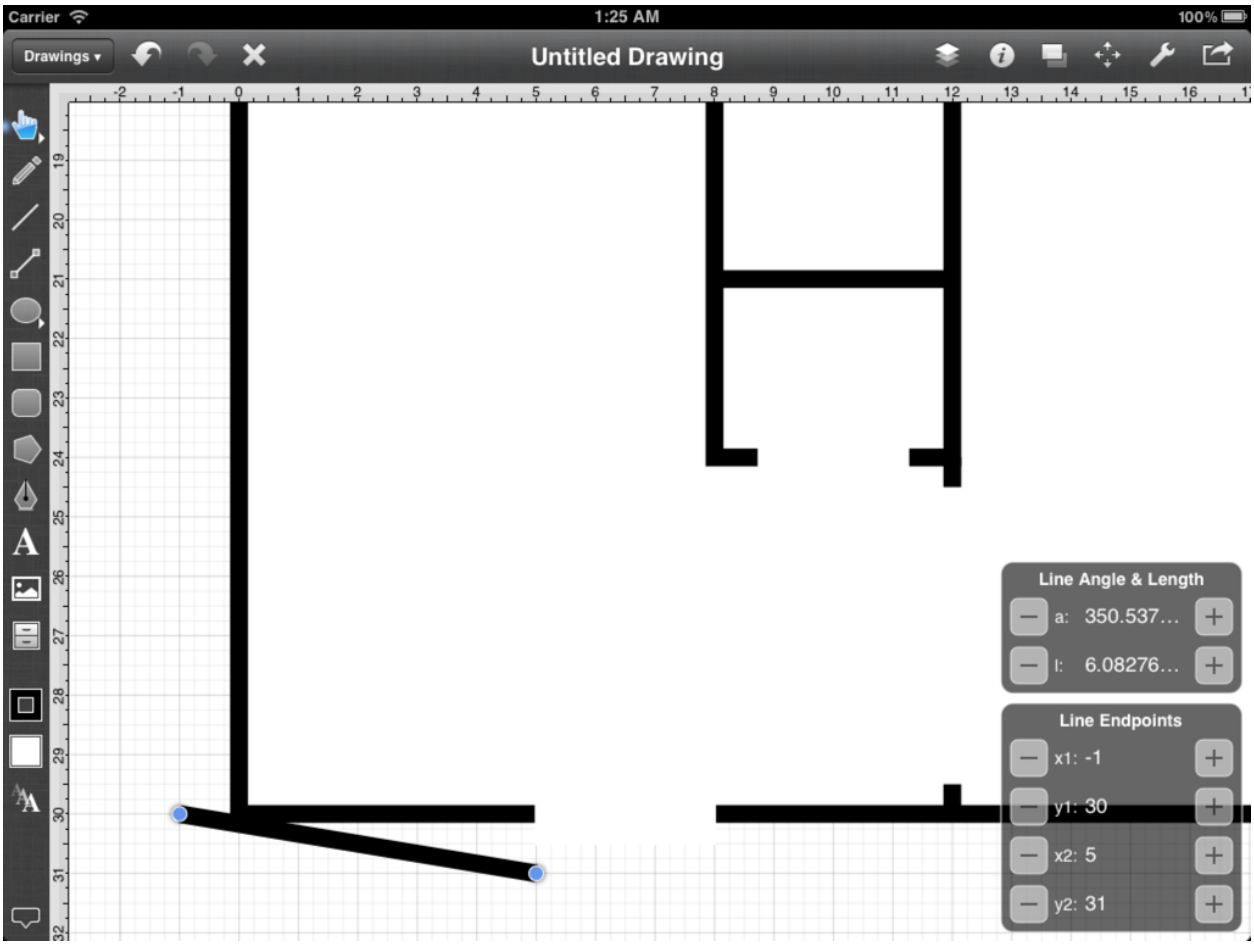


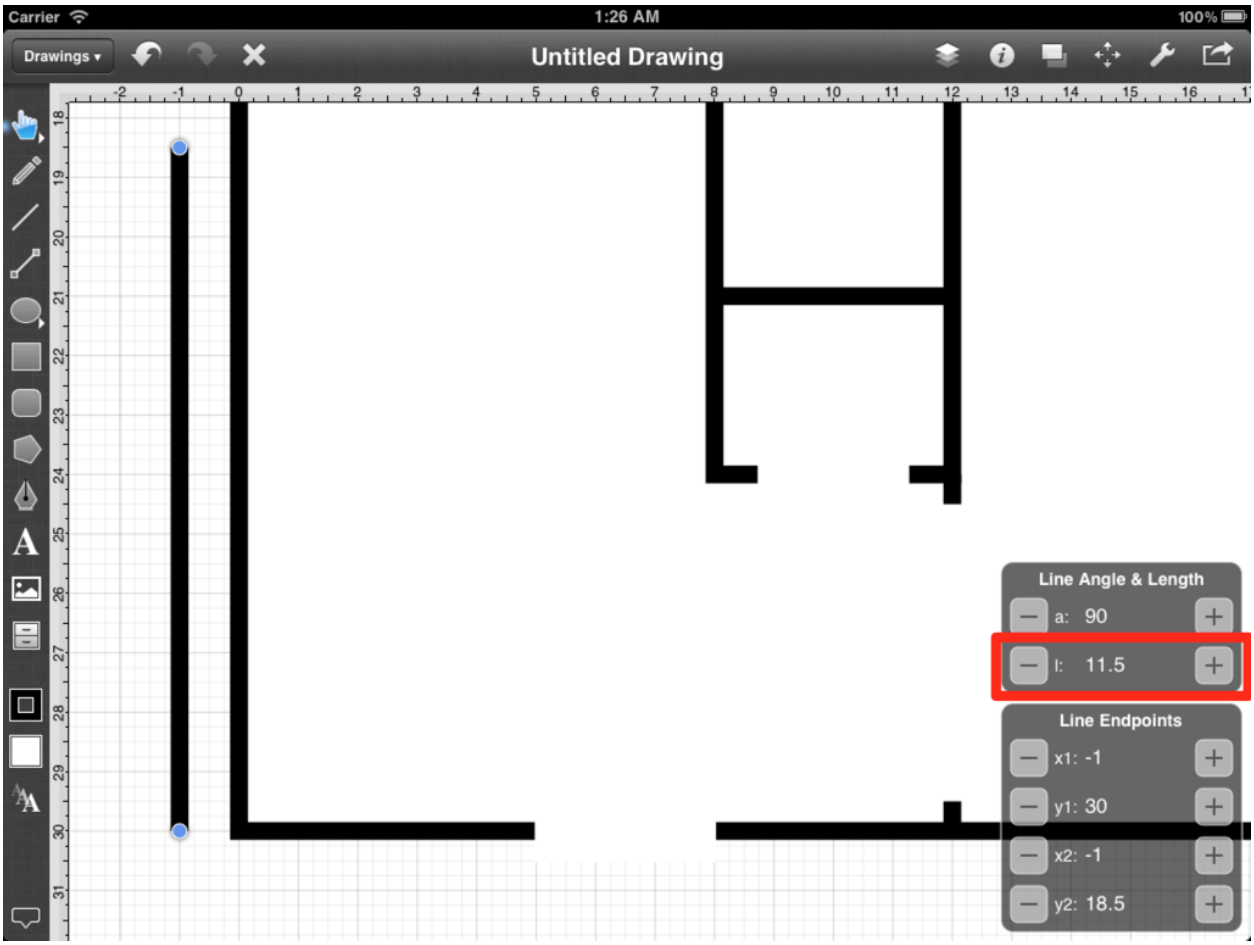
You'll notice that the cutout has been centered within that wall; however, it will need to be made smaller as that door should be 2ft 6in. For this adjustment, the easiest thing to do is to grab the left center handle and move it over 3 inches, and then grab the right center handle and move it to the left 3 inches.

Note: At this zoom level there is a grid stop every 3 inches (1/4 of a foot), which makes the above adjustment easy. If we were to zoom in further, grid stops would appear every 1 inch.

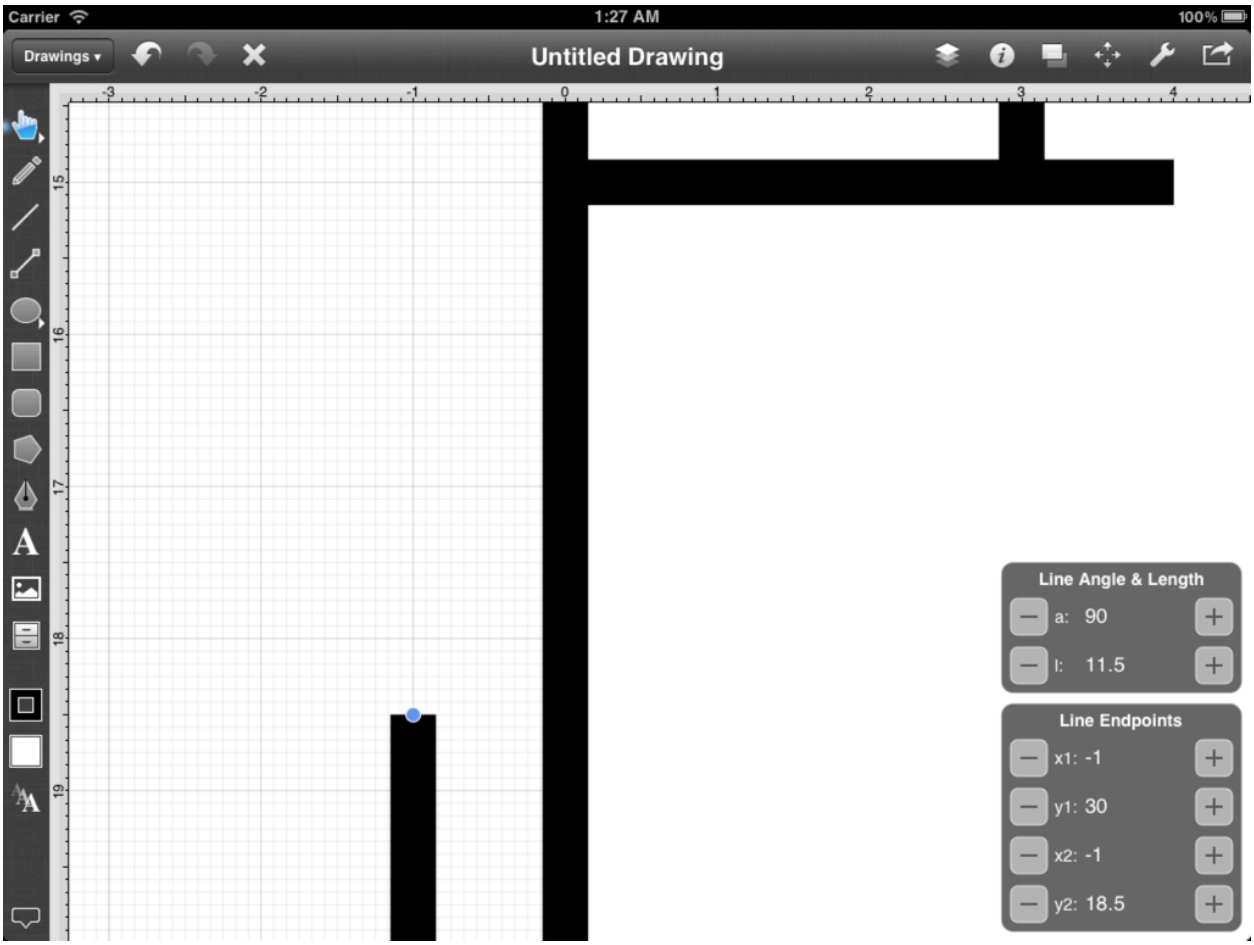


Next, move onto the side door. As seen in the example above, this door is 11 ft 7 in from the lower left hand corner. Since a temporary line already exists on the drawing, we'll just drag the handles and re-use it for the side door as well.

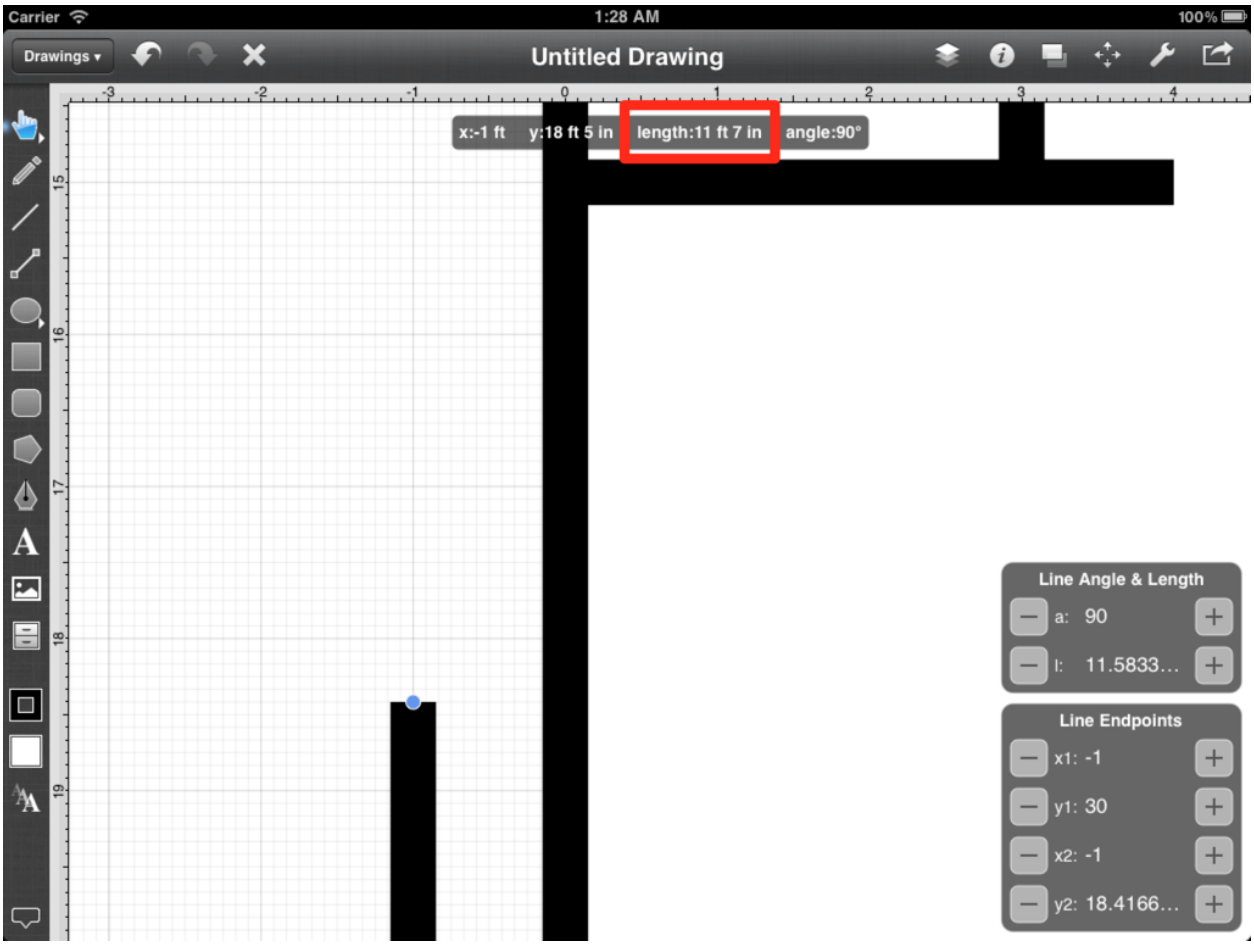

Carrier
1:25 AM
100%
Drawings
Untitled Drawing
Line Angle & Length
a: 350.537…
l: 6.08276…
Line Endpoints
x1: -1
y1: 30
x2: 5
y2: 31



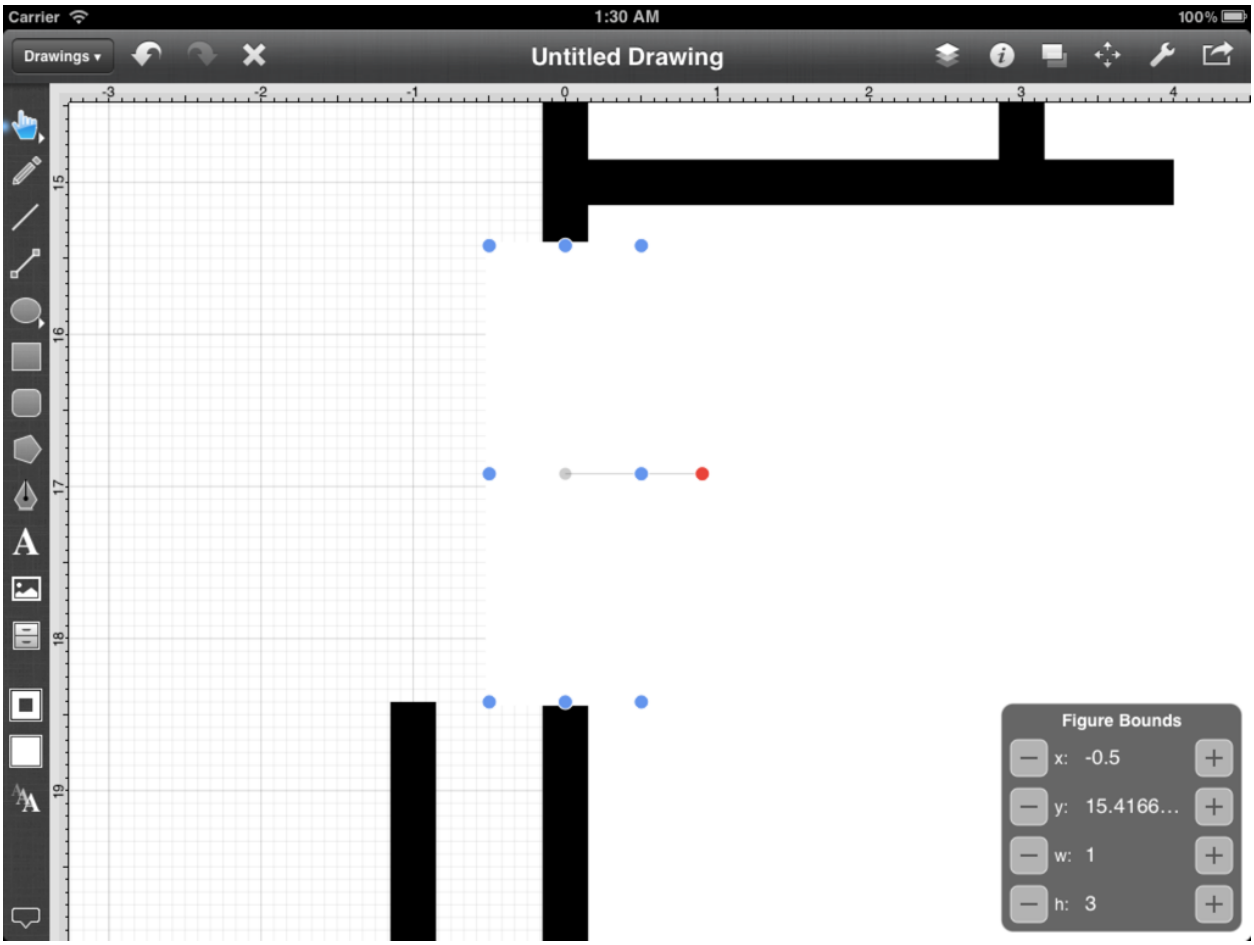
At the current zoom level, the line can be dragged up 11.5 ft (11 ft 6 in); however, we'll need to zoom in more to extend that temporary line the final 1 inch.



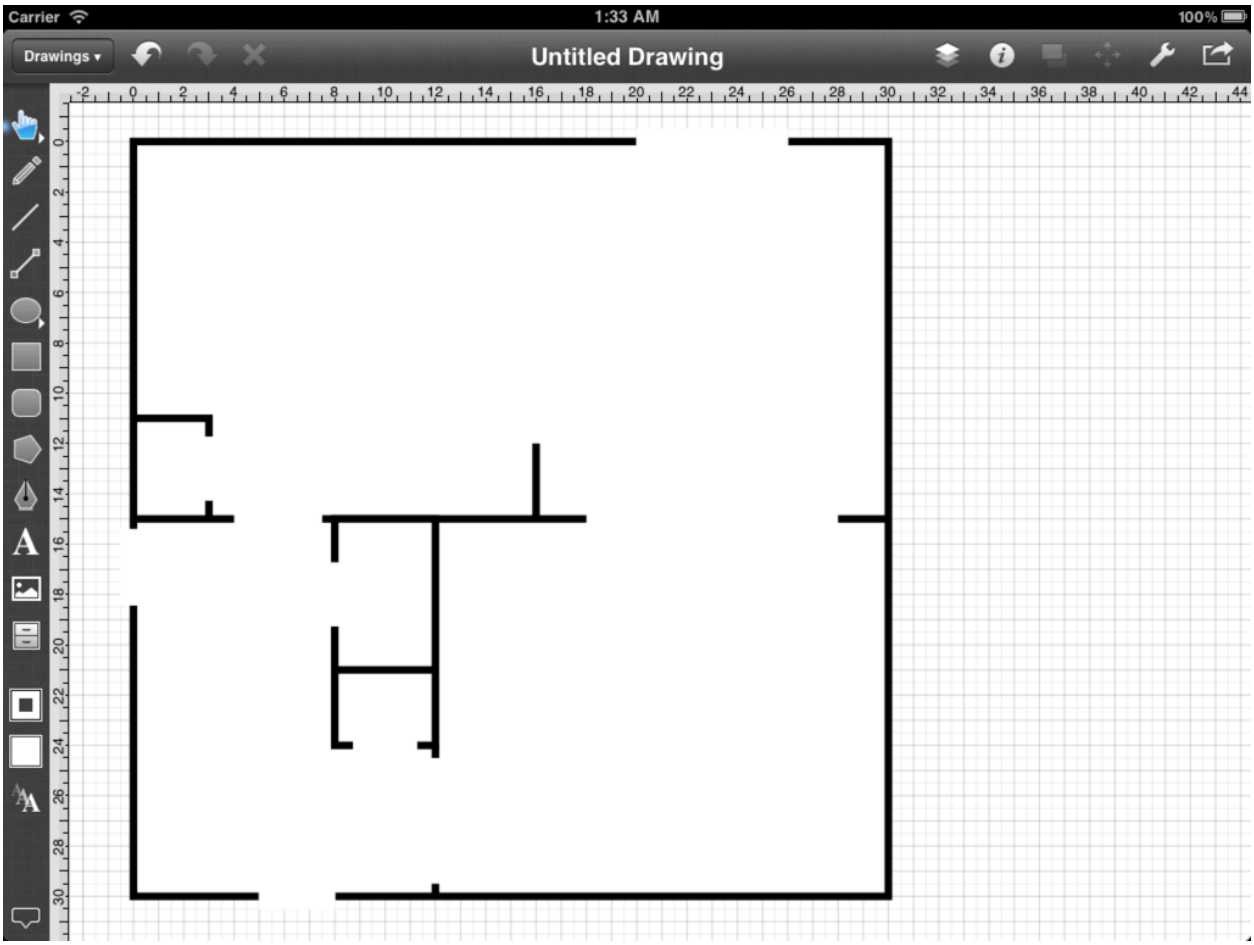
As the temporary line is dragged, you can look at the info bar that pops up to make sure it is dragged to the correct length.



Next, create the cutout rectangle for this door using the Rectangle Tool.



Select and delete the temporary reference line and create the cutouts for the rest of the doors by using the same process as above to generate the result shown below:



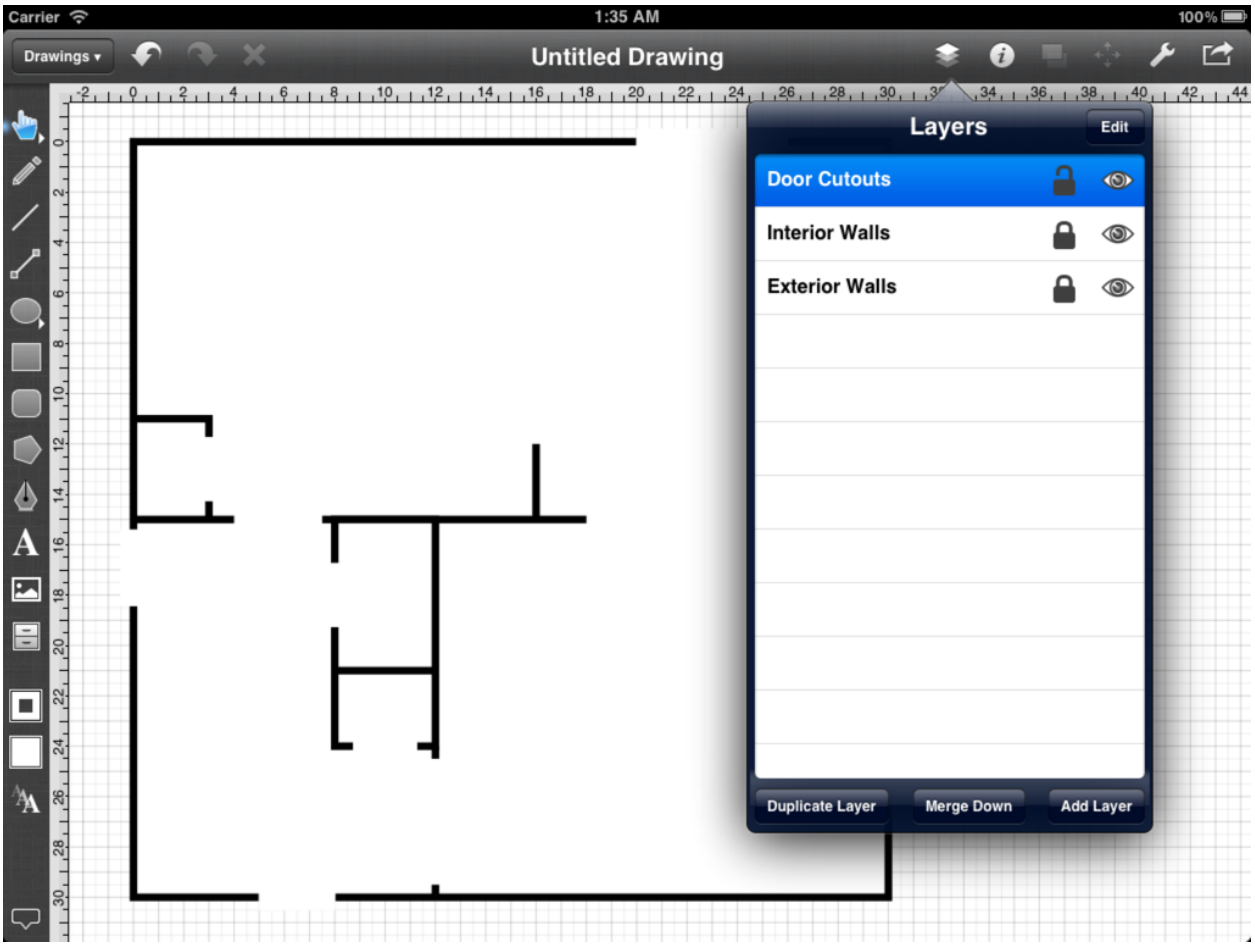
Continue to Next Step

13. Step 12 - Adding the Doors Layer

The next step is to create a new layer where the door locations are "cut out".

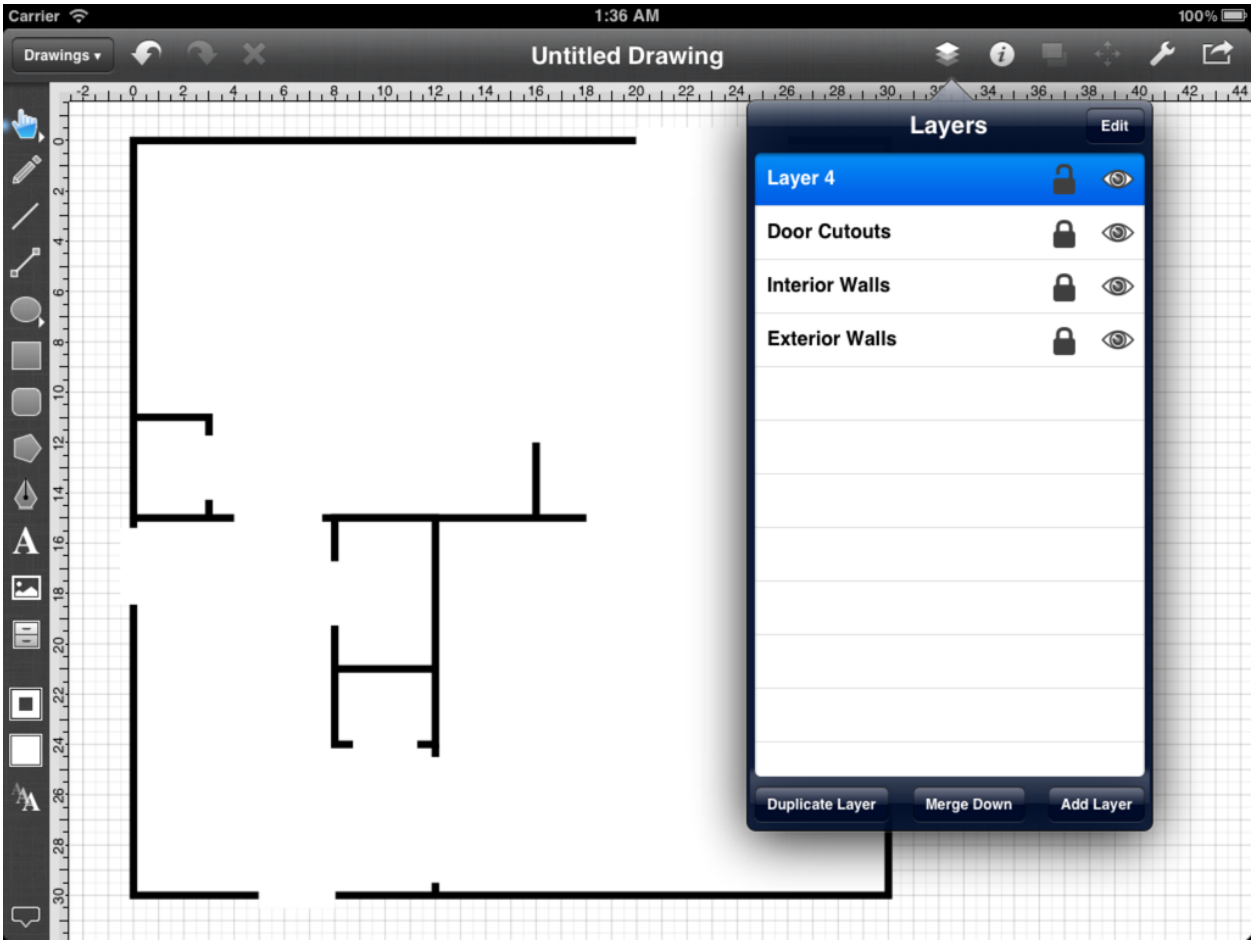
As with the previous step where a new layer for the *Interior Walls* was added, the same process must be followed to create a layer for the **Doors**.

First, open the Layers Menu.

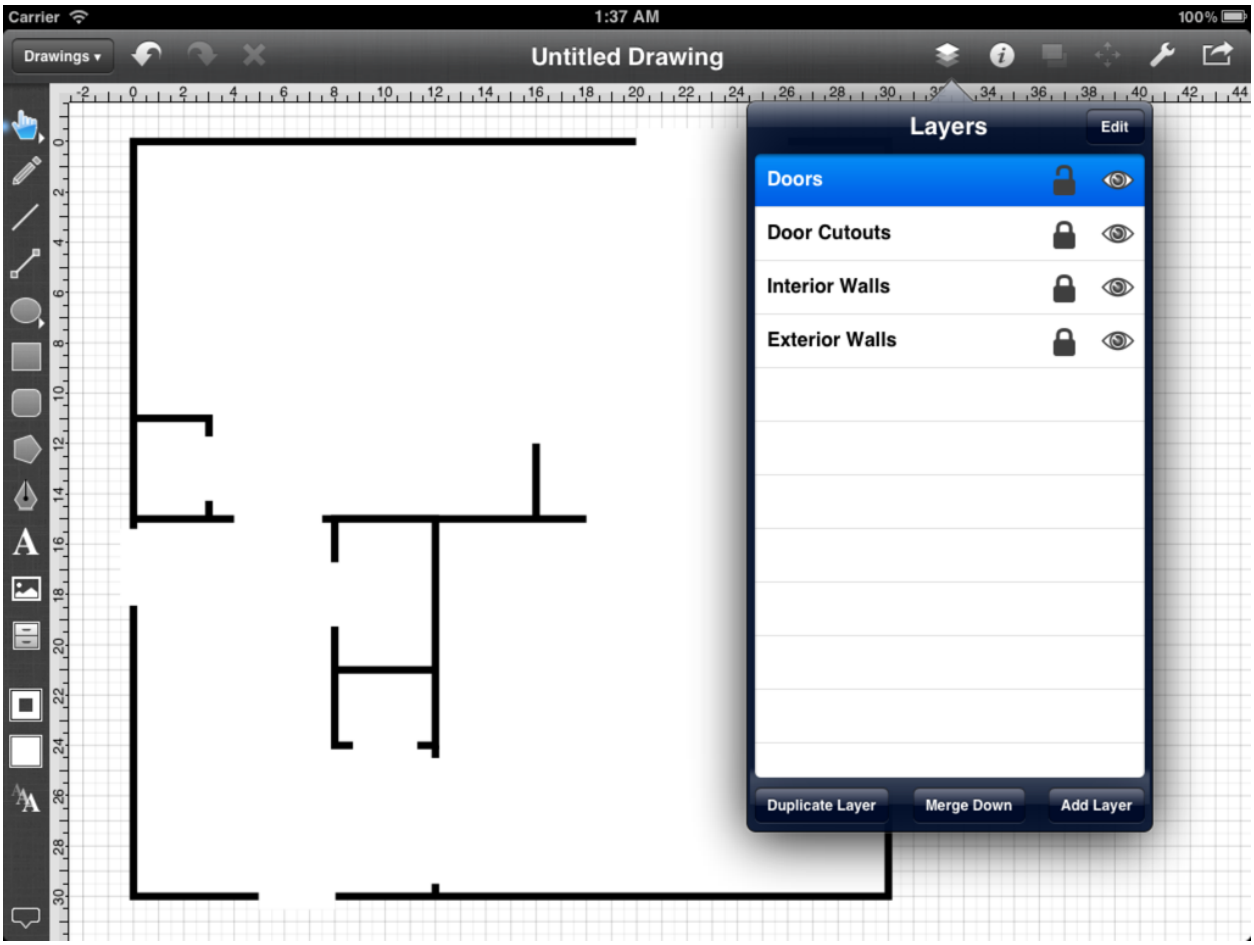


Second, lock the **Door Cutouts** layer since additional changes will not have to be made.

Third, press on the **Add Layer Button** in the Layers Menu to create a new layer.



Fourth, as before, press on the **Edit Button** in the upper right hand corner of the menu and rename *Layer 4* to **Doors**.

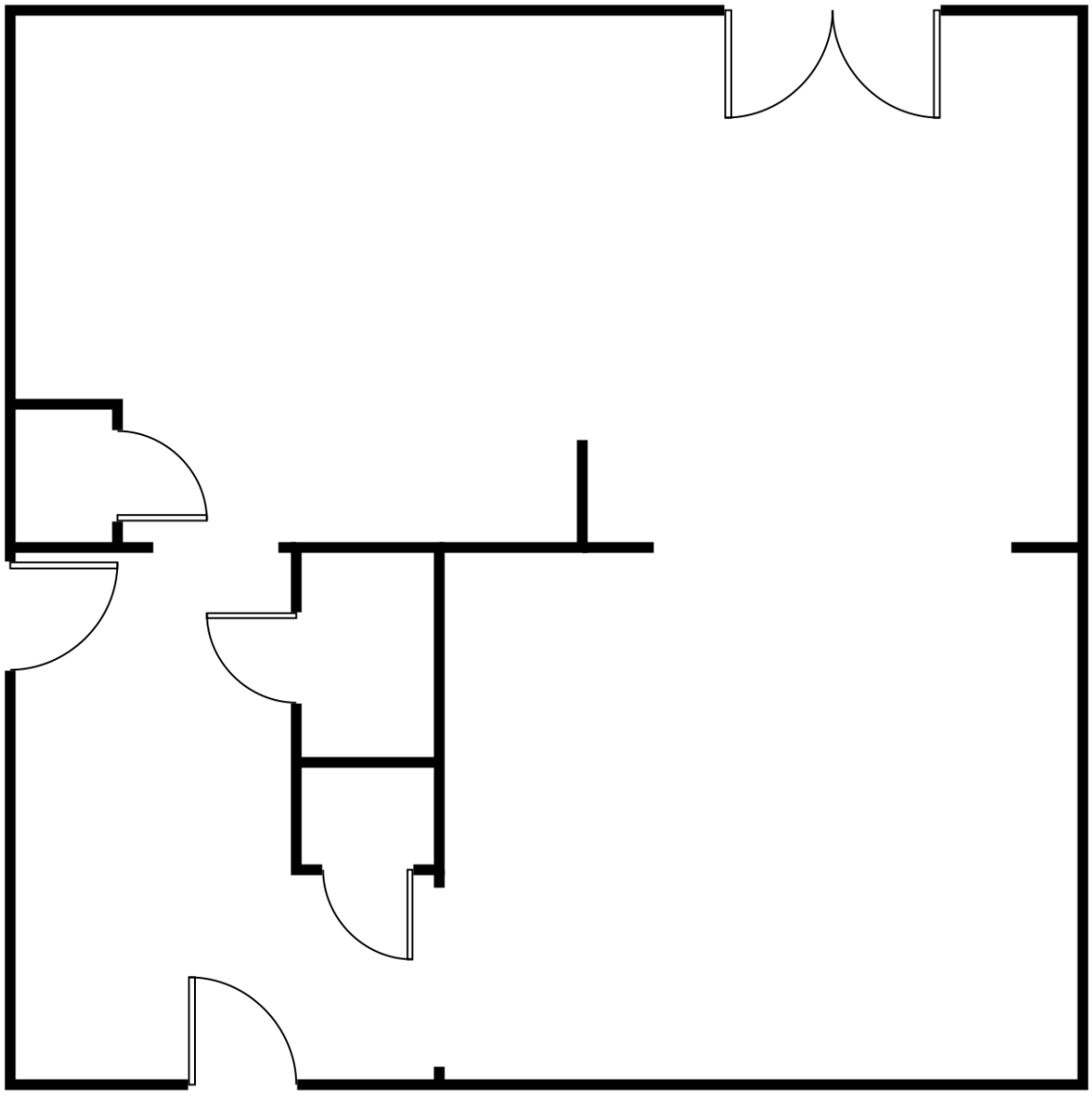


Lastly, make sure that the **Doors** layer is selected and then dismiss the **Layers Menu** by tapping outside of it.

Continue to Next Step

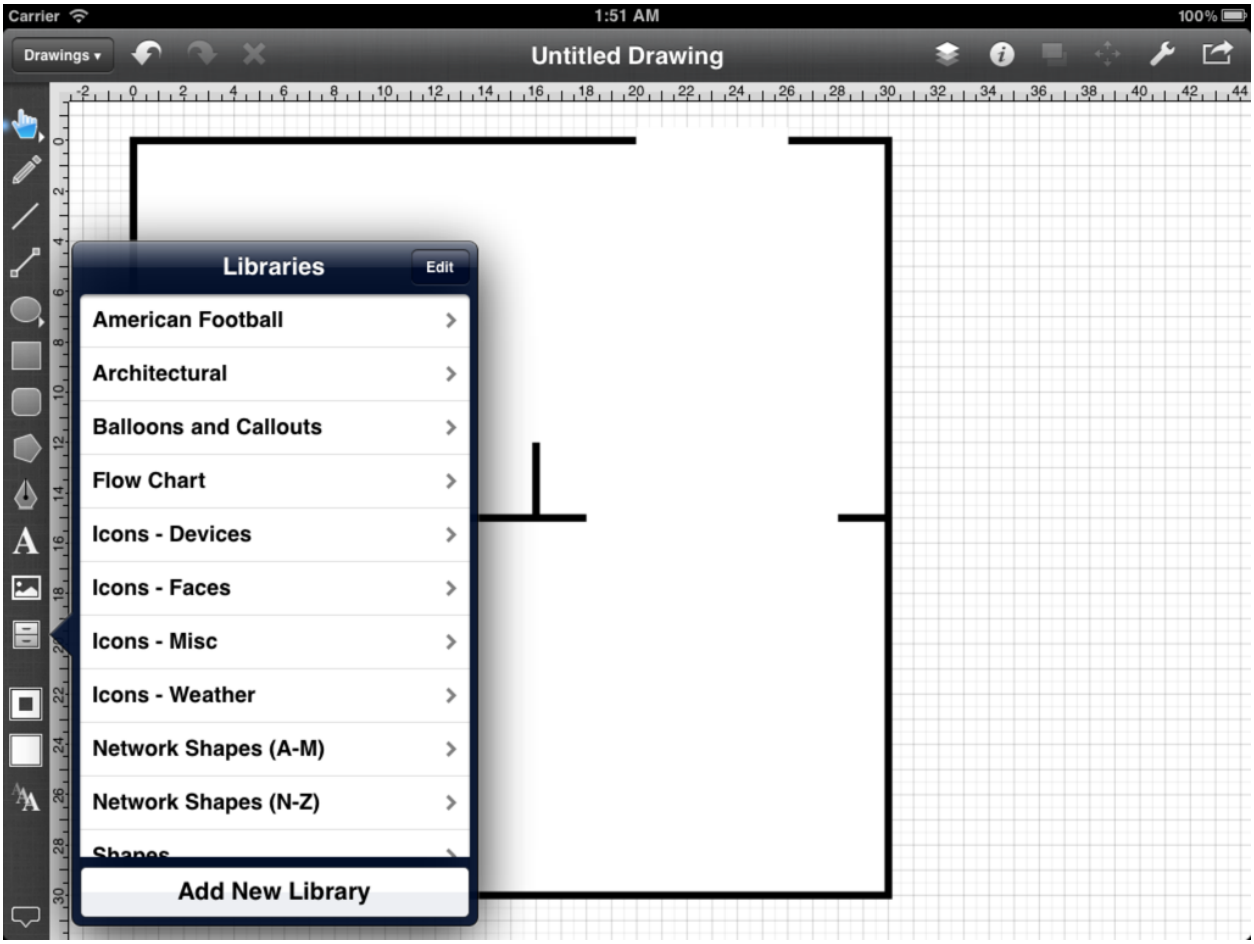
14. Step 13 - Adding the Doors

The next step in this process is to add the doors into the drawing. We've created the following drawing by hiding every layer except for the Exterior Walls, Interior Walls, Door Cutouts, and Doors to make it simple to understand which way the doors should swing.

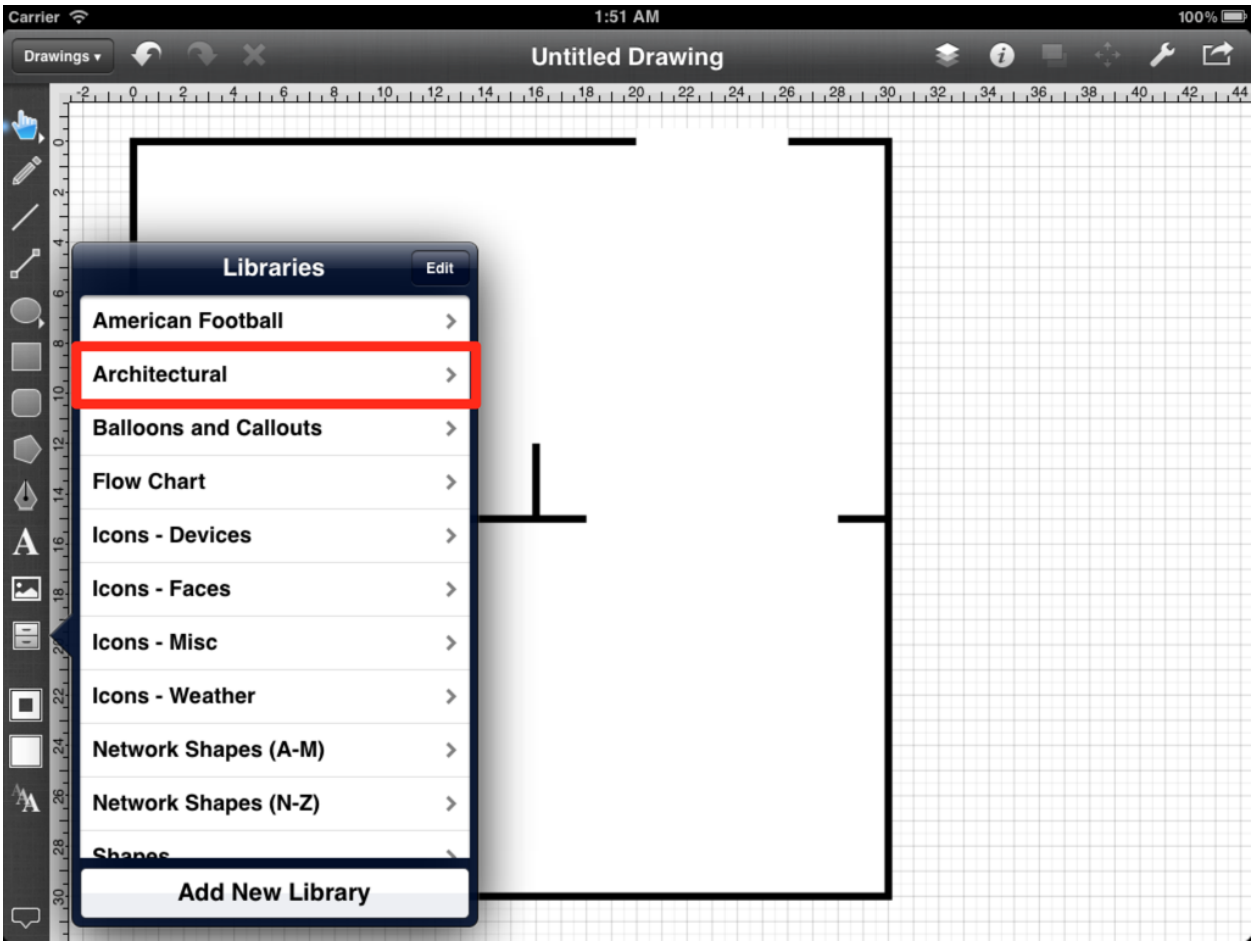


First, open the Libraries Window and navigate to the **Architectural** stencil sets. Press on the **Libraries Button**

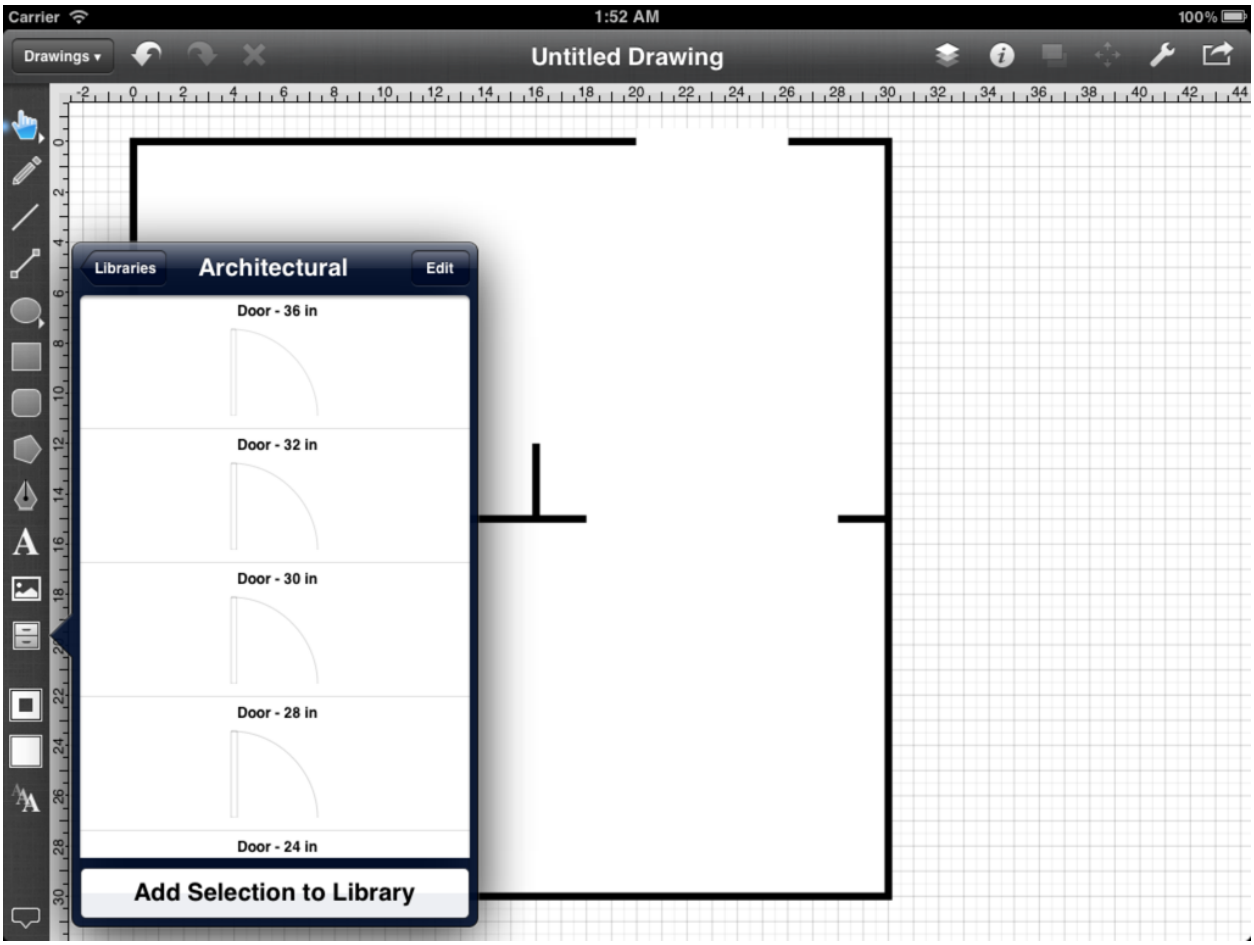
(looks like a file cabinet) in the Drawing Toolbar to access the libraries and stencils.



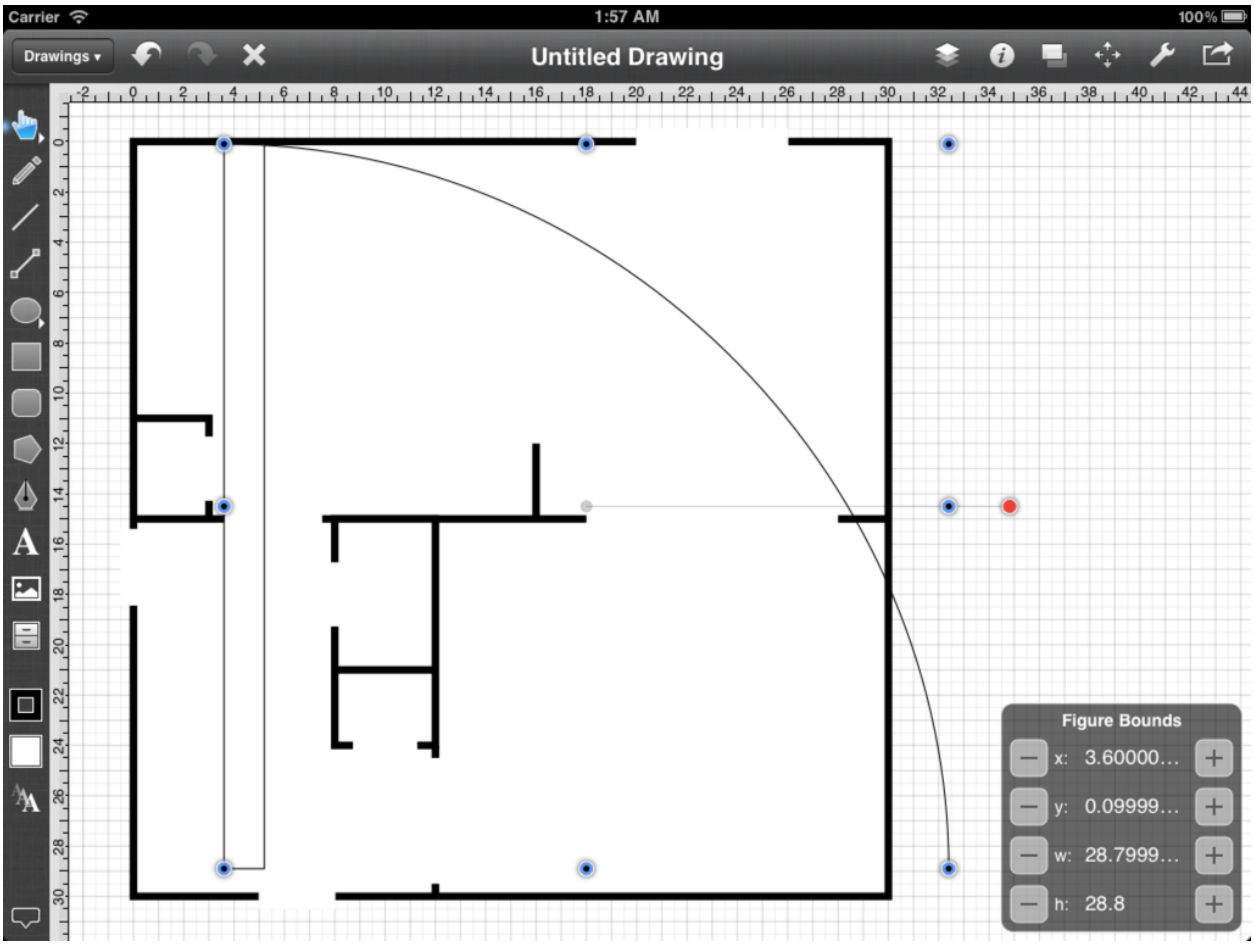
Next, select the **Architectural** entry to view the architectural stencils.



After opening the **Architectural** stencil library, the **Doors** will appear at the top of the list.



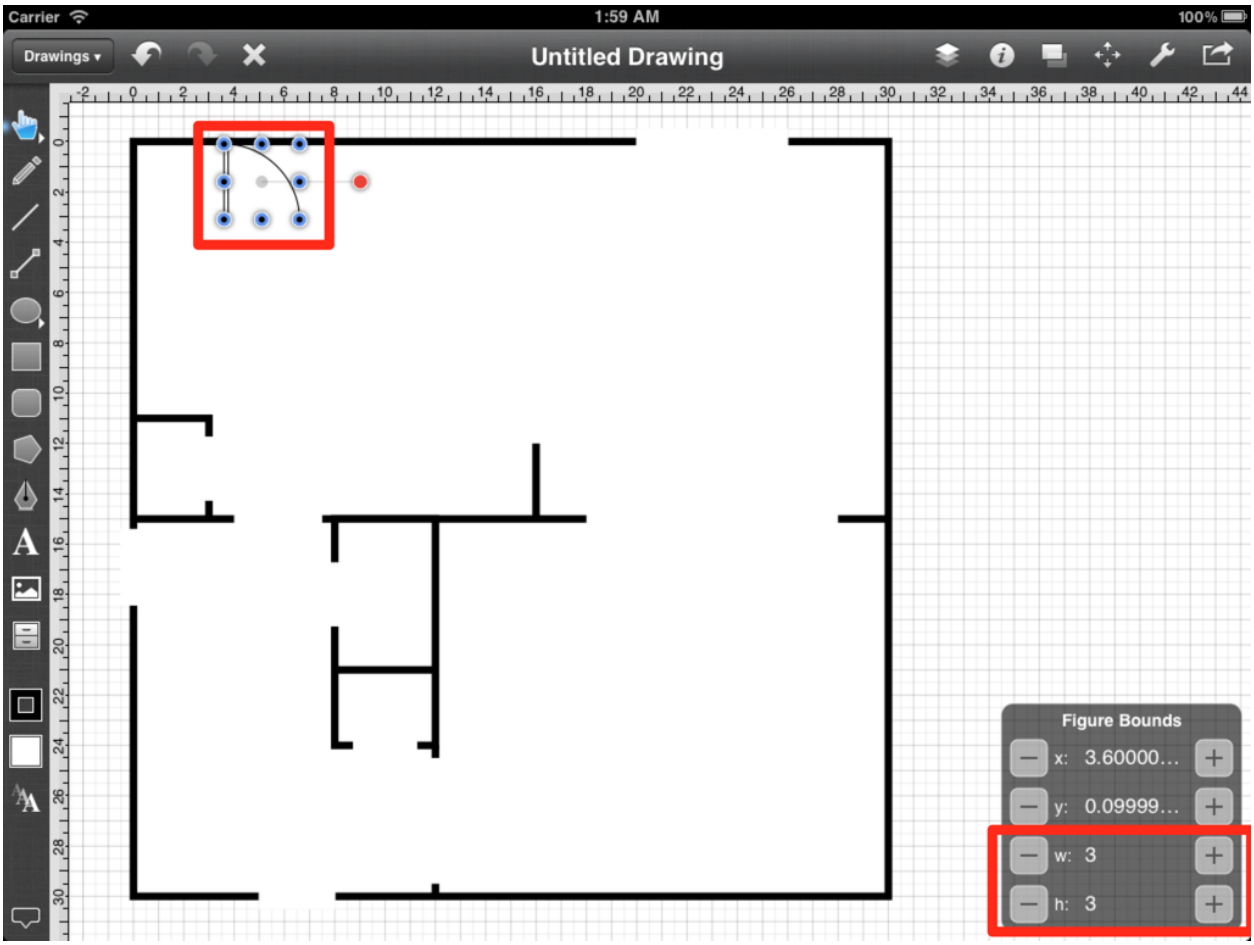
Select the 36 inch door in the list. A prompt wil appear in the drawing canvas with the words "Touch the drawing where you would like to insert the figure from the library". Simply tap in the center of the drawing.



The inserted door will be much bigger than the scale of the drawing that is being worked on. This is because the stencil was created at the "default" Dots per Unit setting that was changed in the one of the earlier steps.

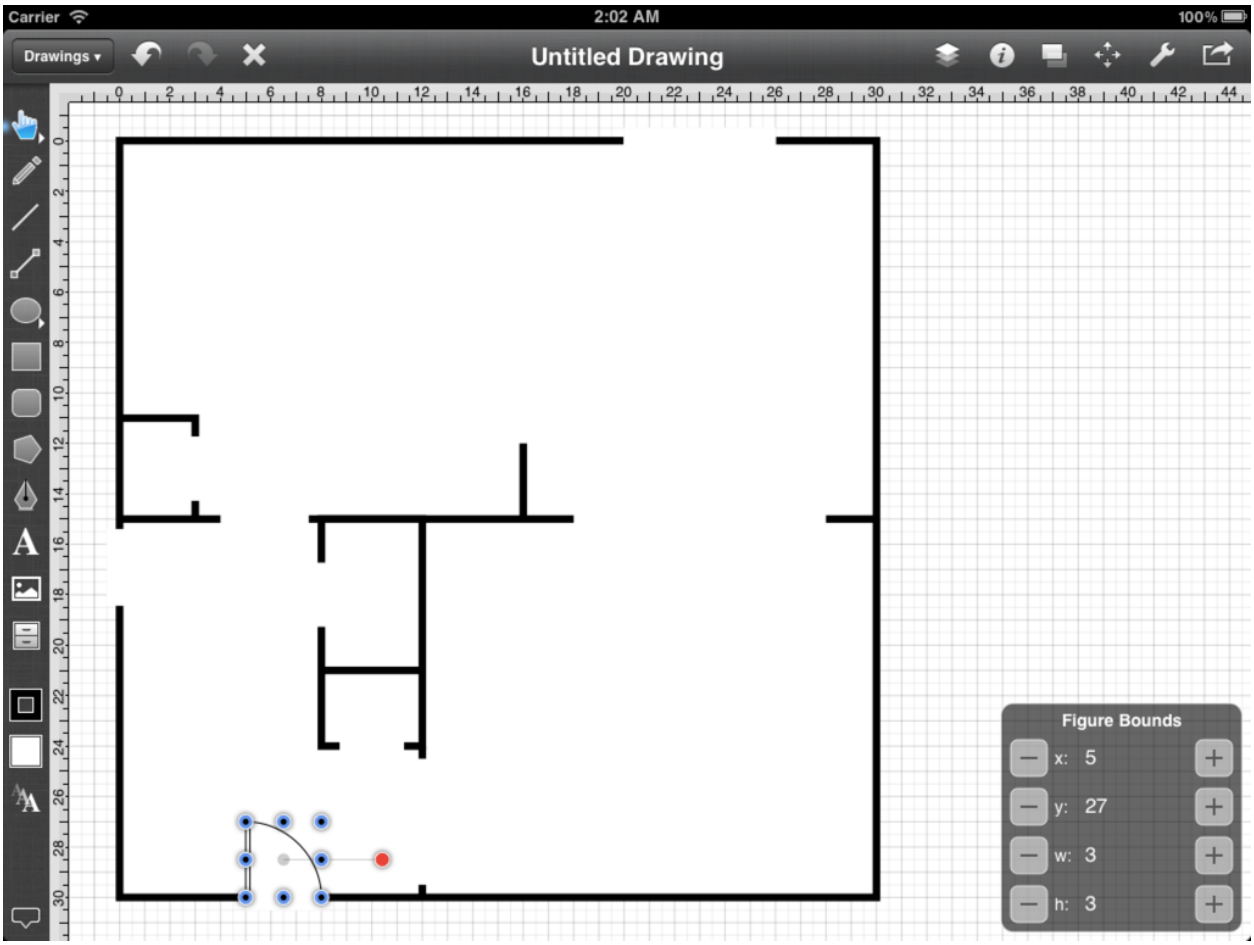
Note: The issue where the stencils aren't scaled to match the current **Dots per Unit** will be in TouchDraw 2.0, if not sooner.

To resize the door, use the width and the height entries in the overlay panel. Enter a value of 3 for the width and the height since the front door should be 36" (or 3 ft).

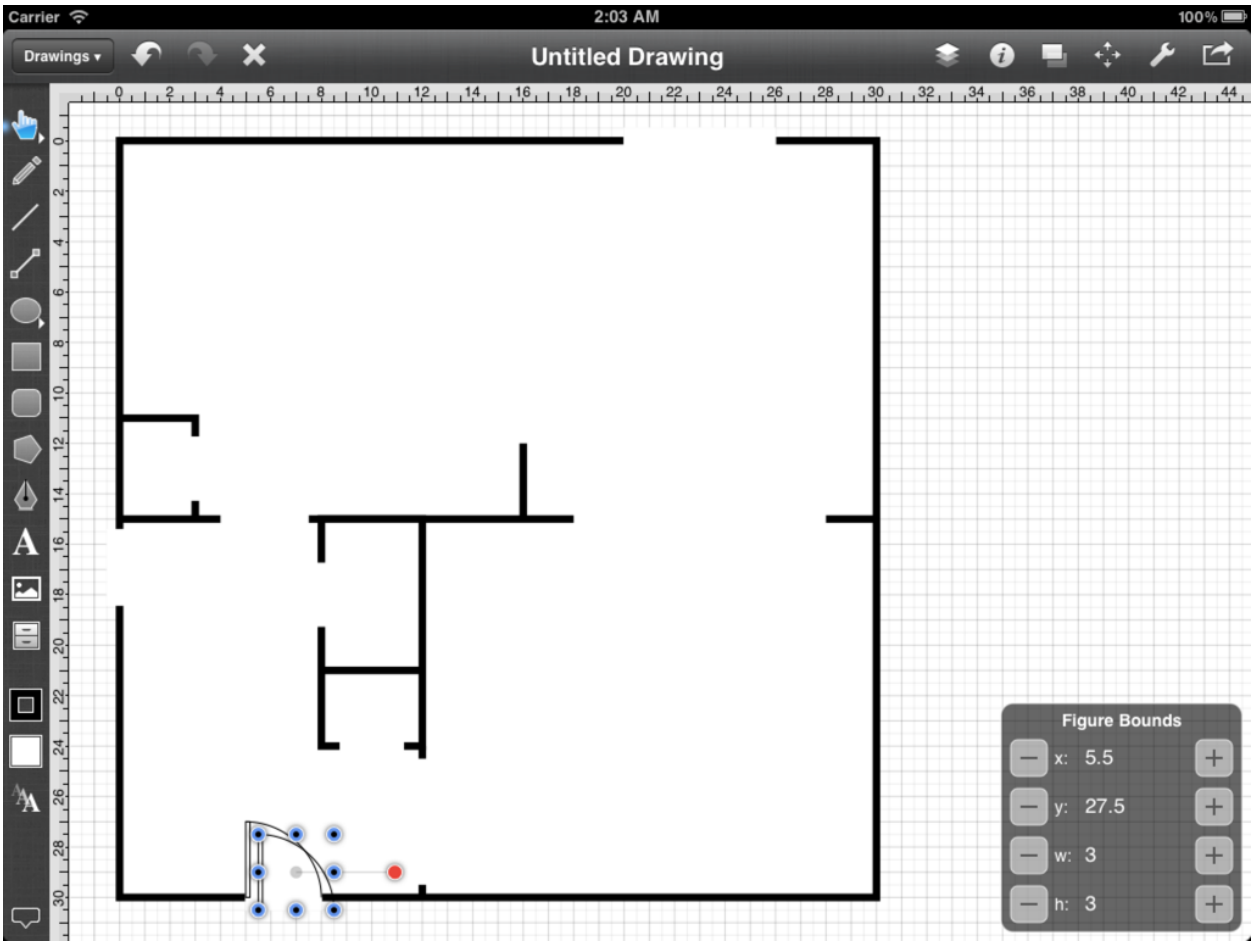


Now that the door is sized correctly, drag it down to the front door location for placement.

Note: It may be necessary to zoom in a little to position the door correctly within the door cutout. The overlay can also be used to set the doors X position to 5 and Y position to 27.

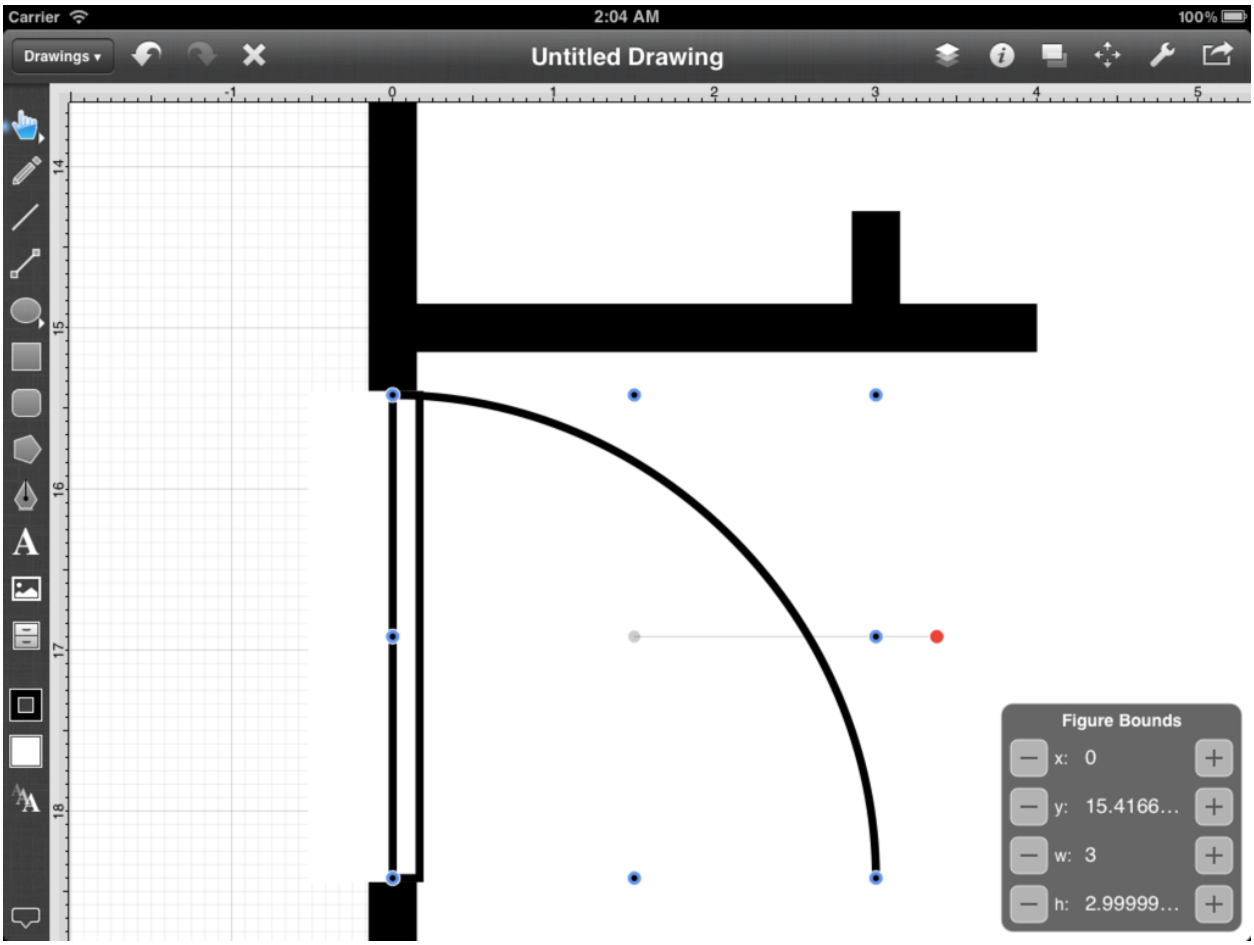


Next, duplicate the door by using the same technique used earlier in this tutorial.

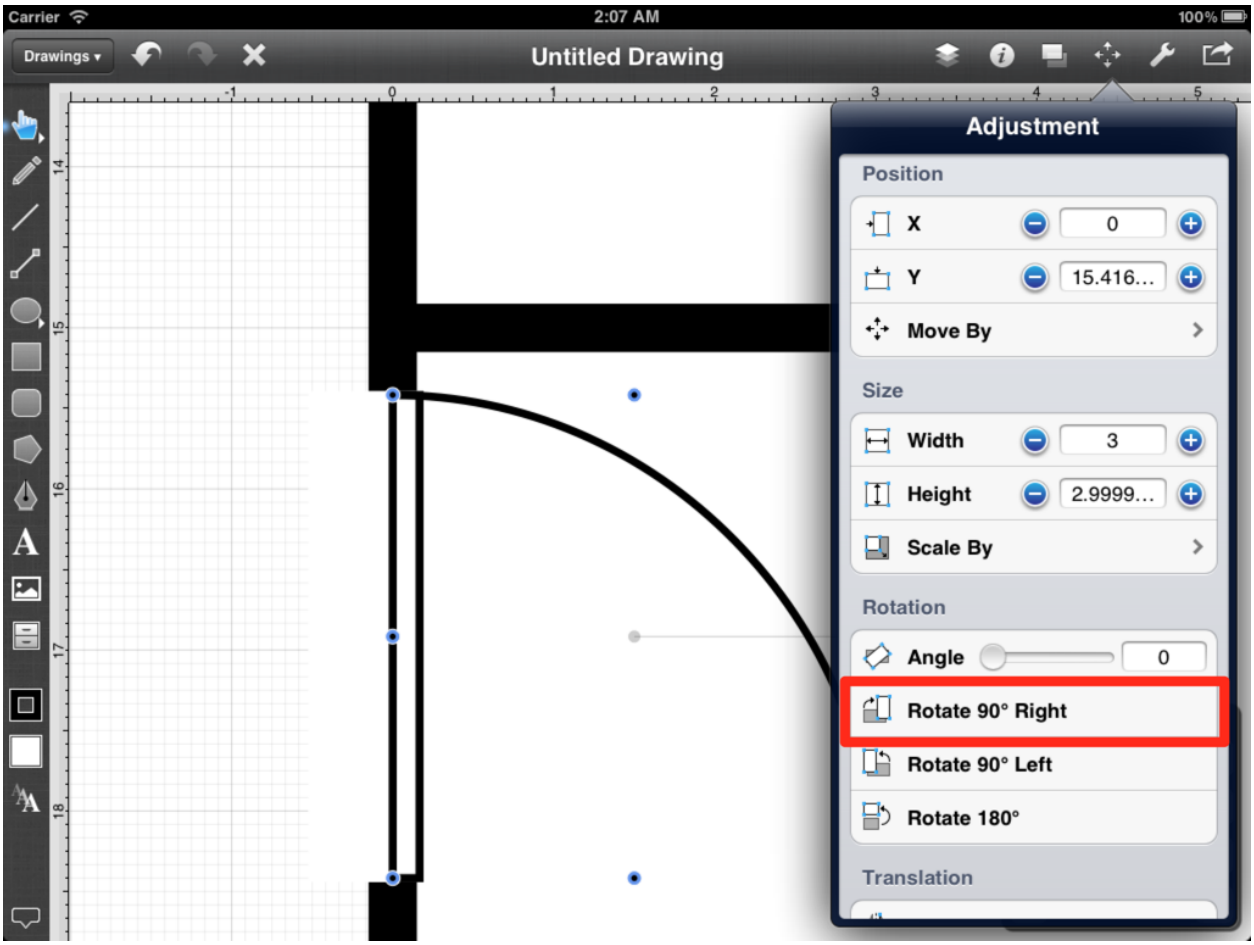


Then drag the door to where the side door should be placed.

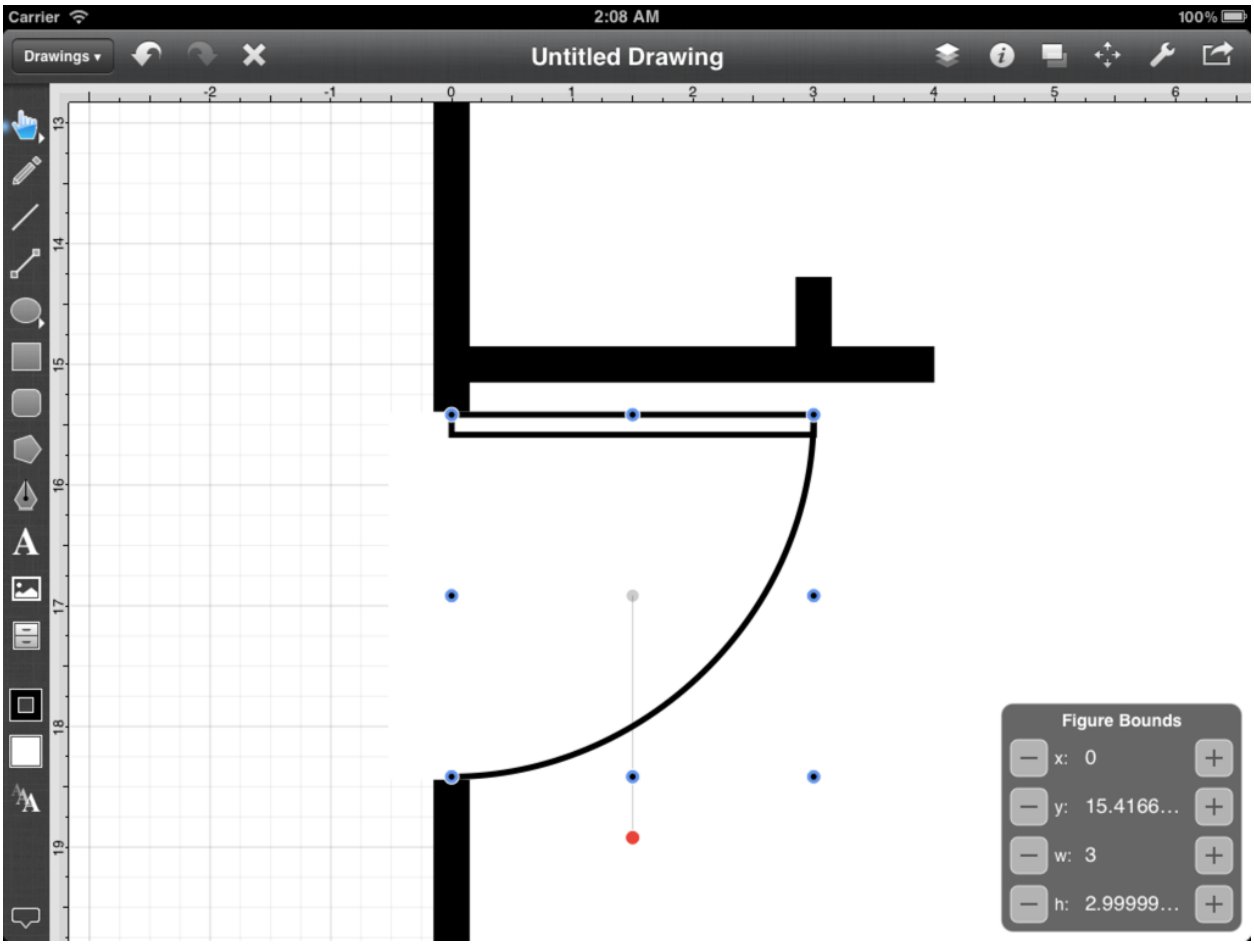
Note: Since this door is 11 ft 7 in from the lower right, you will need to zoom in until the 1 inch grid units are visible in order to place it correctly.



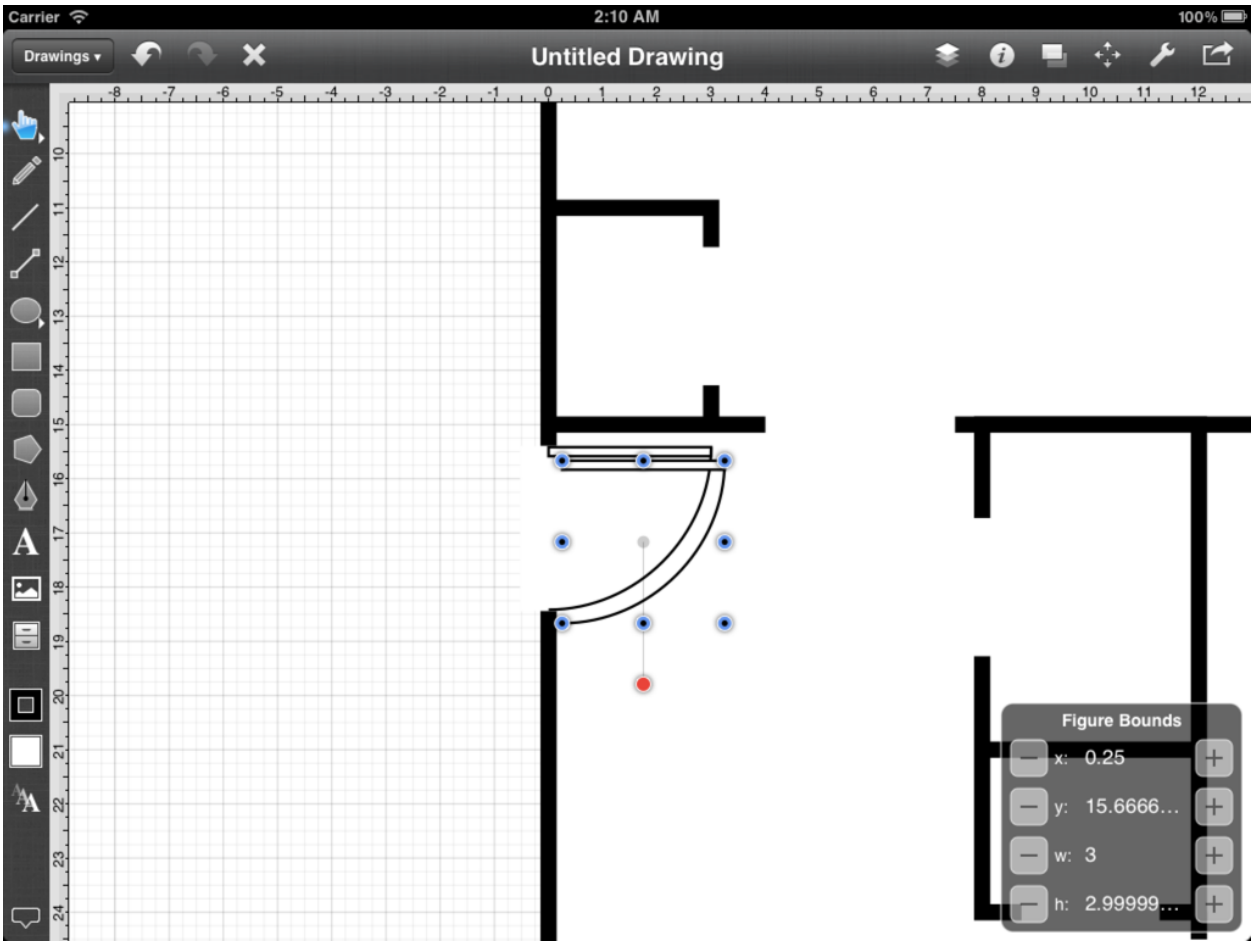
Next, use either the red **Rotation Handle** or the Rotate 90 Degrees Right command to rotate the door into it's final position. The **Rotate 90 Degrees Right** command can be found in the Adjustment Menu.



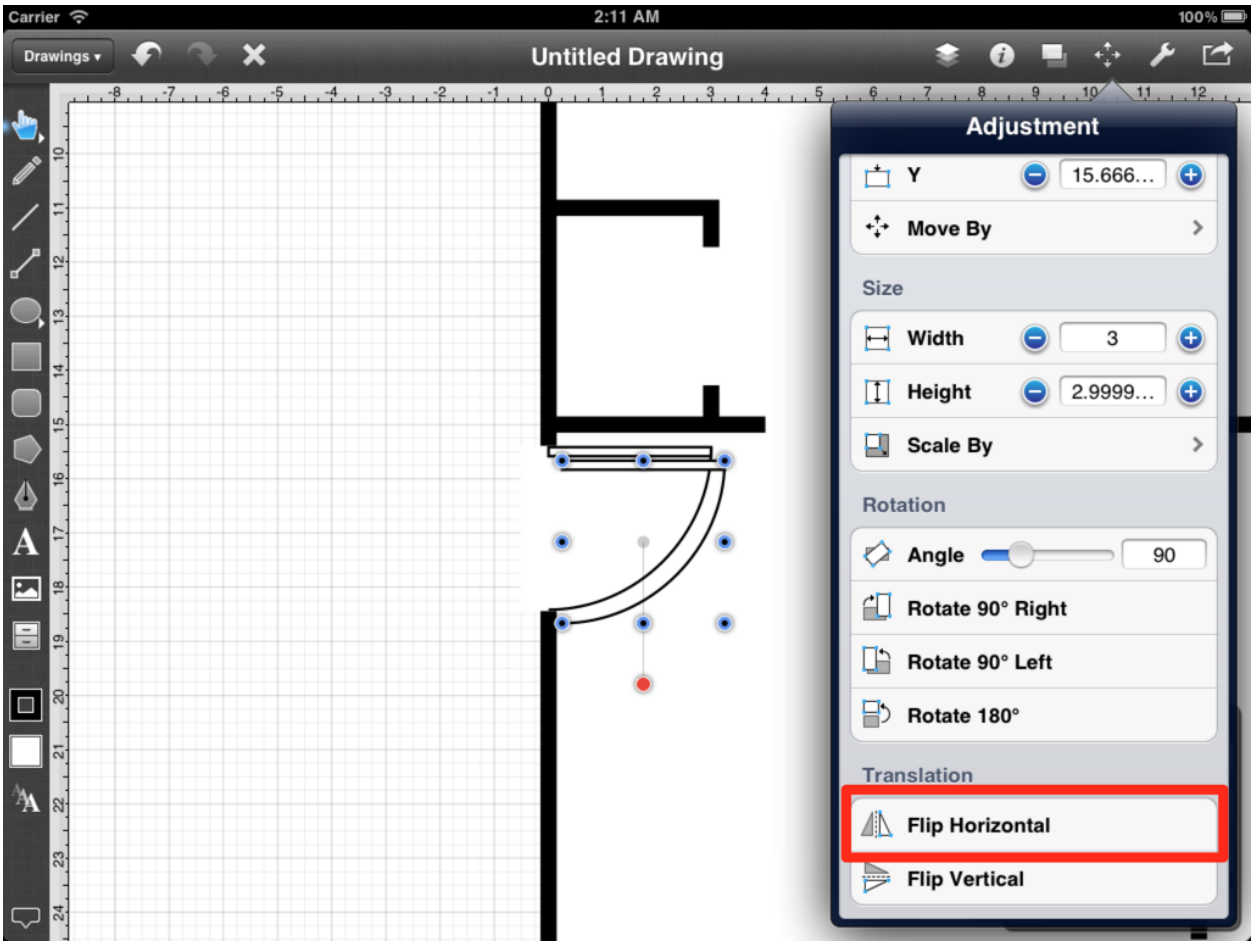
The side door will be in the correct location after executing the above command.



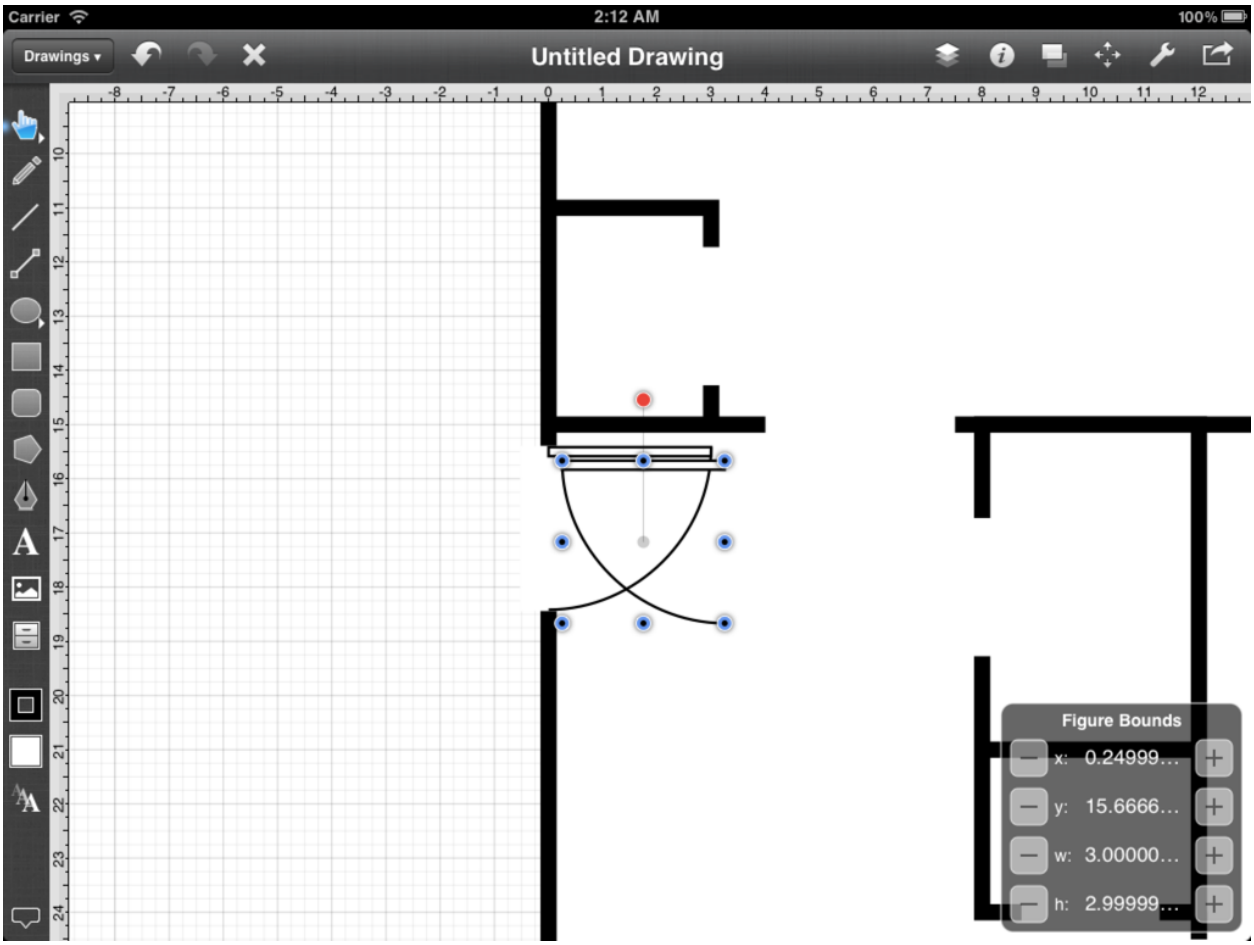
Next, duplicate this door to create a door for the bathroom.



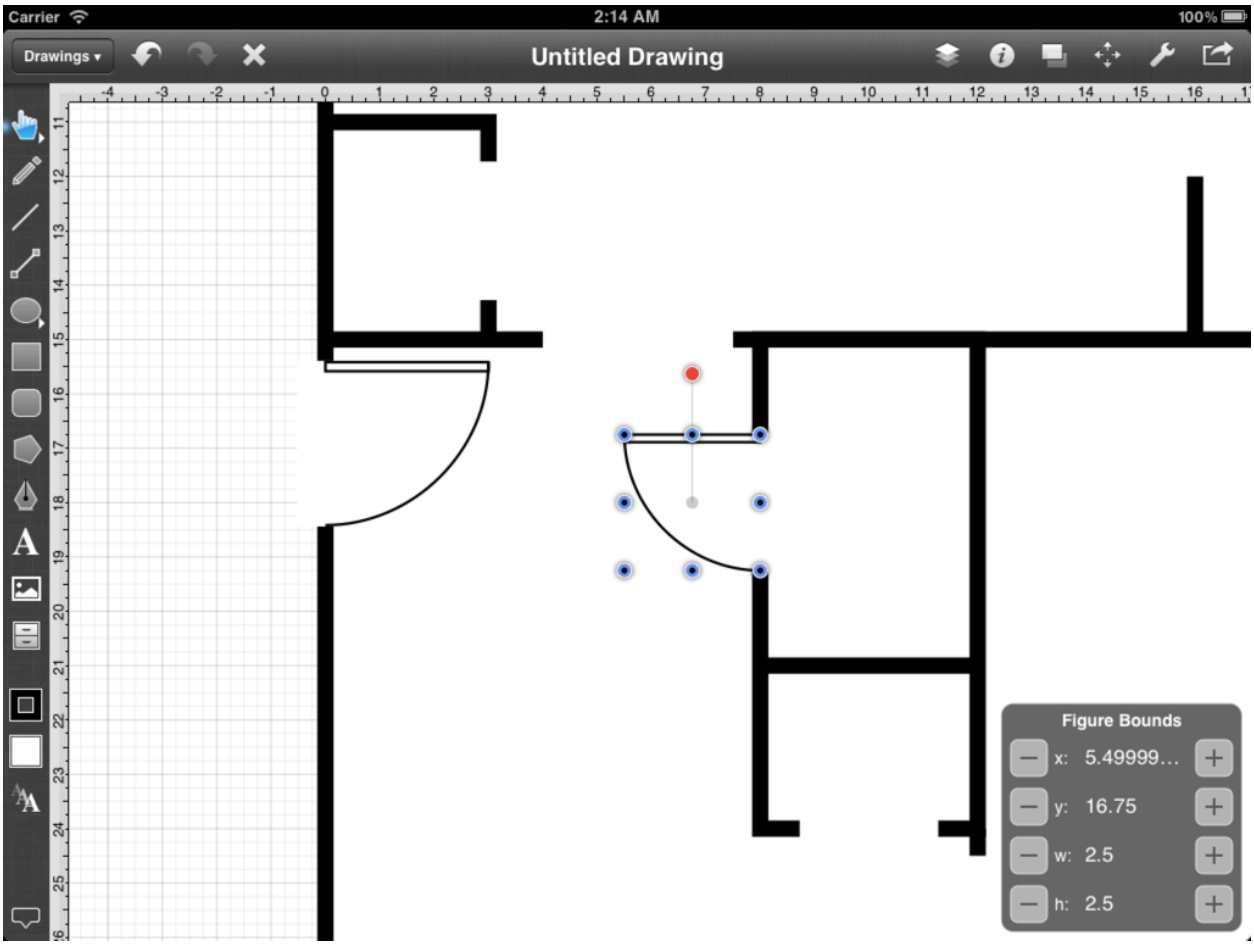
As you can see, the orientation for this door is wrong and it needs to be flipped horizontally. Open the Adjustment Menu and tap on the **Flip Horizontal** option.



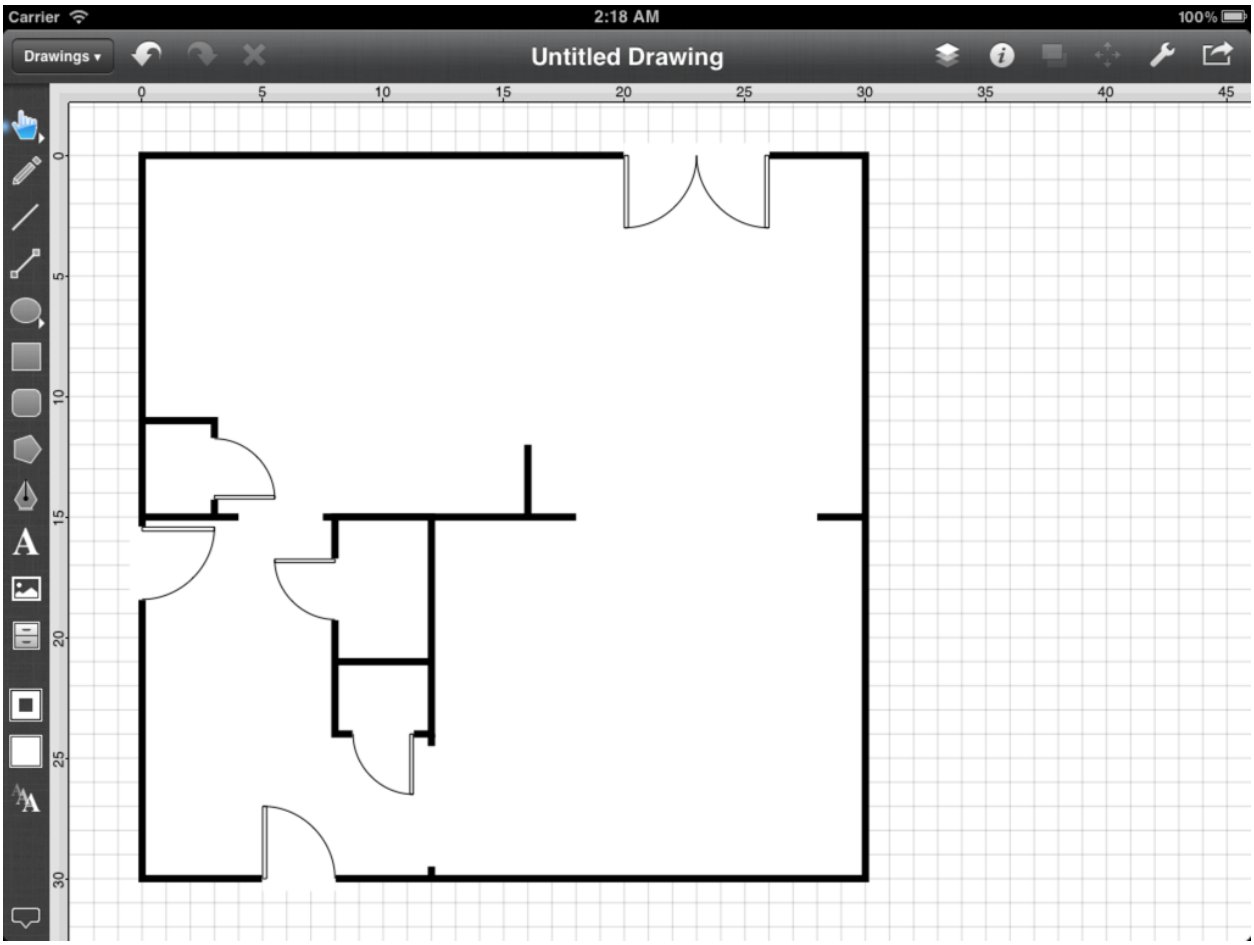
The bathroom door will have the correct orientation after executing the **Flip Horizontal** command.



Next, the size of the door must be edited. The bathroom door is 2.5 ft (2 ft 6in) and the overlay panel can be used to edit the size of the door. Once the size has been adjusted, zoom in on the bathroom door and drag it to the appropriate location.



Next, use the same techniques as above (Duplicate, Overlay, Flip Horizontal, Flip Vertical and Rotation) to create the doors for the rest of the openings.



Continue to Next Step

15. Step 14 - Adding the Fireplace Layer

The next step is to create a new layer for the fireplace.

As with in previous steps for adding new layers, the same process must be followed to create a layer for the **Fireplace**.

First, open the Layers Menu.

Second, lock the **Doors** layer since no additional changes will be made.

Third, press the **Add Layer Button** to create a new layer.

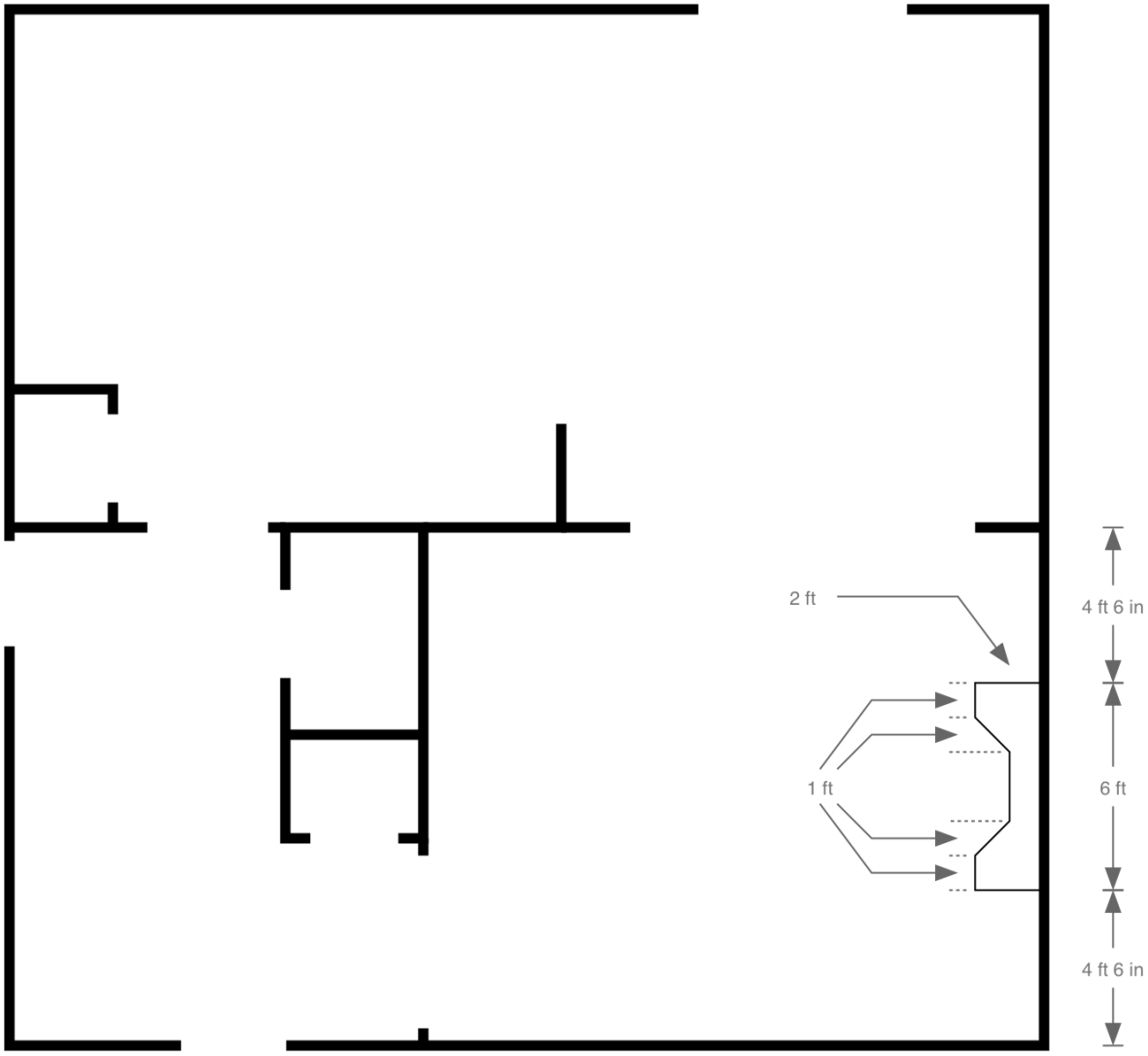
Fourth, as before, press on the **Edit Button** and rename *Layer 5* to **Fireplace**.

Lastly, make certain the **Fireplace** layer is selected, then dismiss the **Layers Menu** by tapping outside of it.

Continue to Next Step

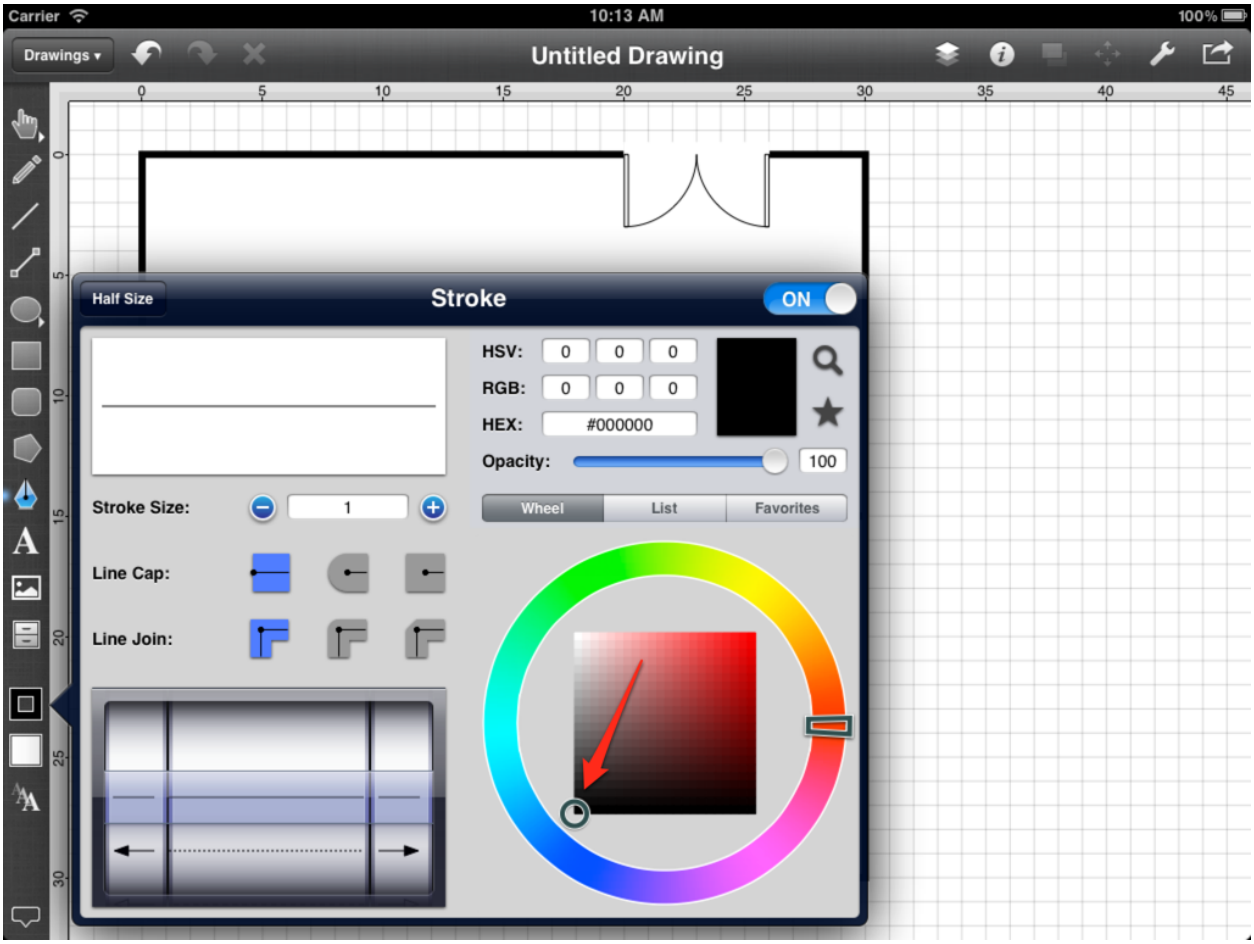
16. Step 15 - Adding the Fireplace

The next step in this process is to add the fireplace into the drawing. We've created the following drawing to make it simple to understand the dimensions of the fireplace.

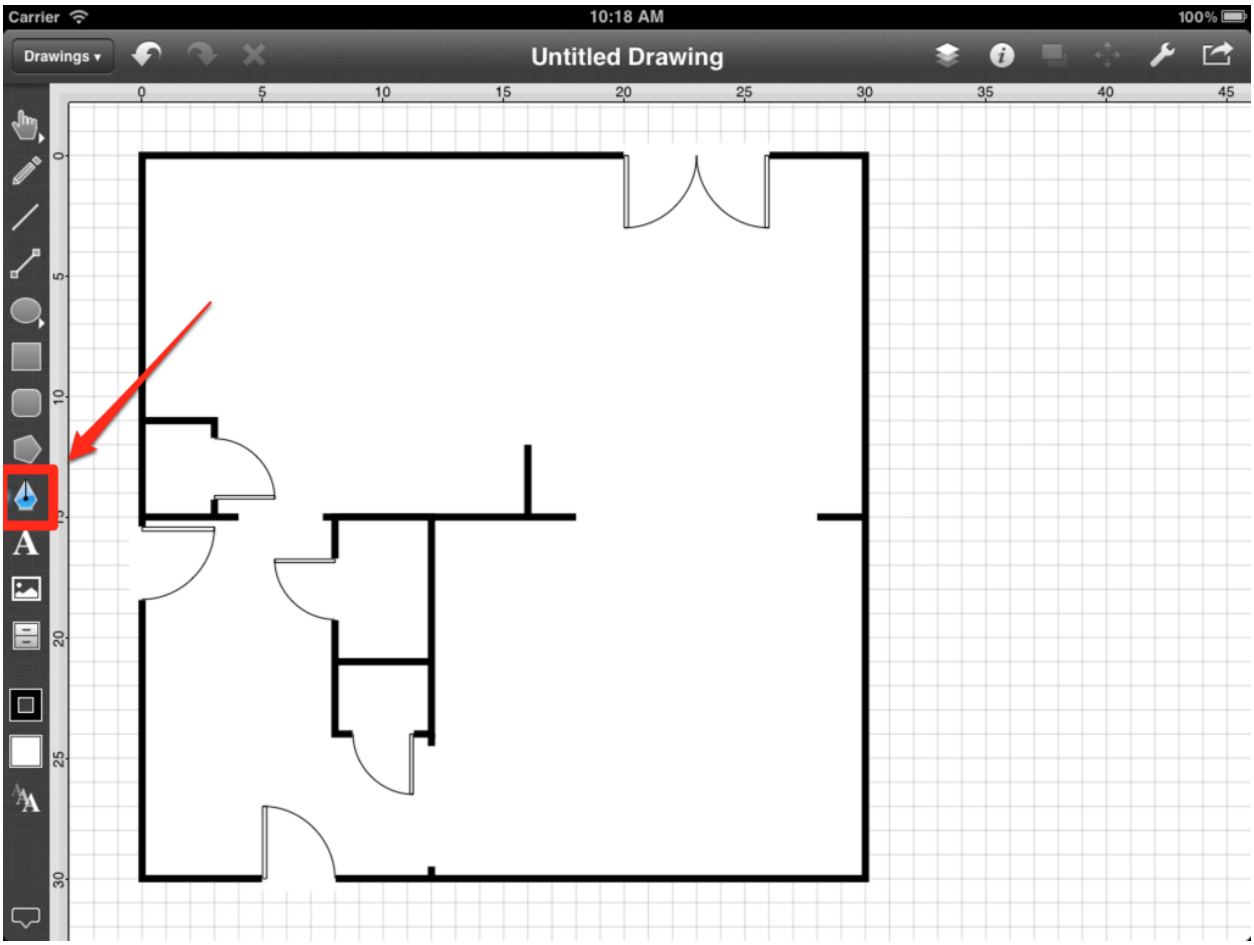


The Path Tool will be used to create the Fireplace in one step rather than by using individual lines and the Join Paths command to create a compound path.

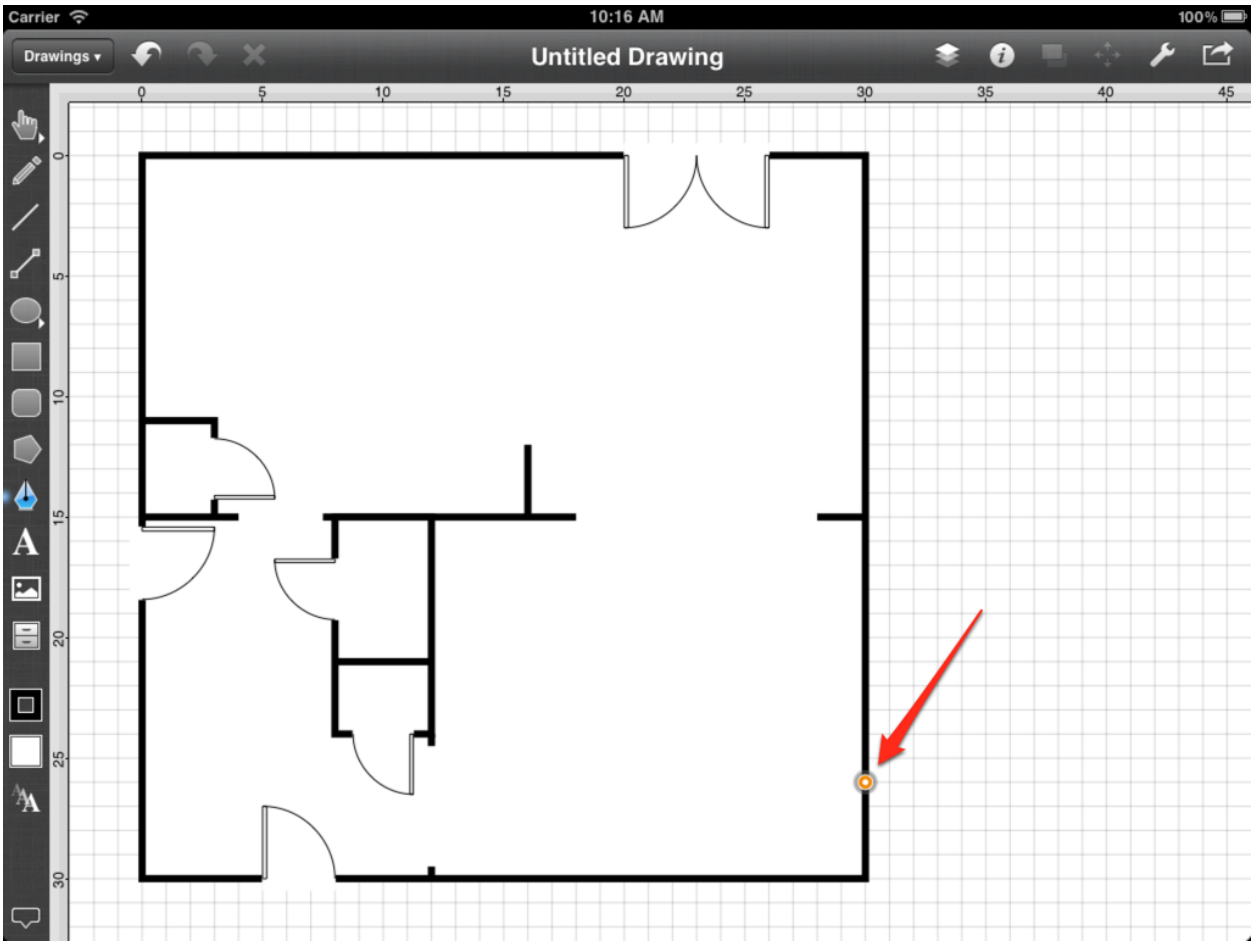
First, the Stroke Editor must be opened to change the Stroke Color to **Black** since the last drawn shape (door cutouts) used a stroke color of white.



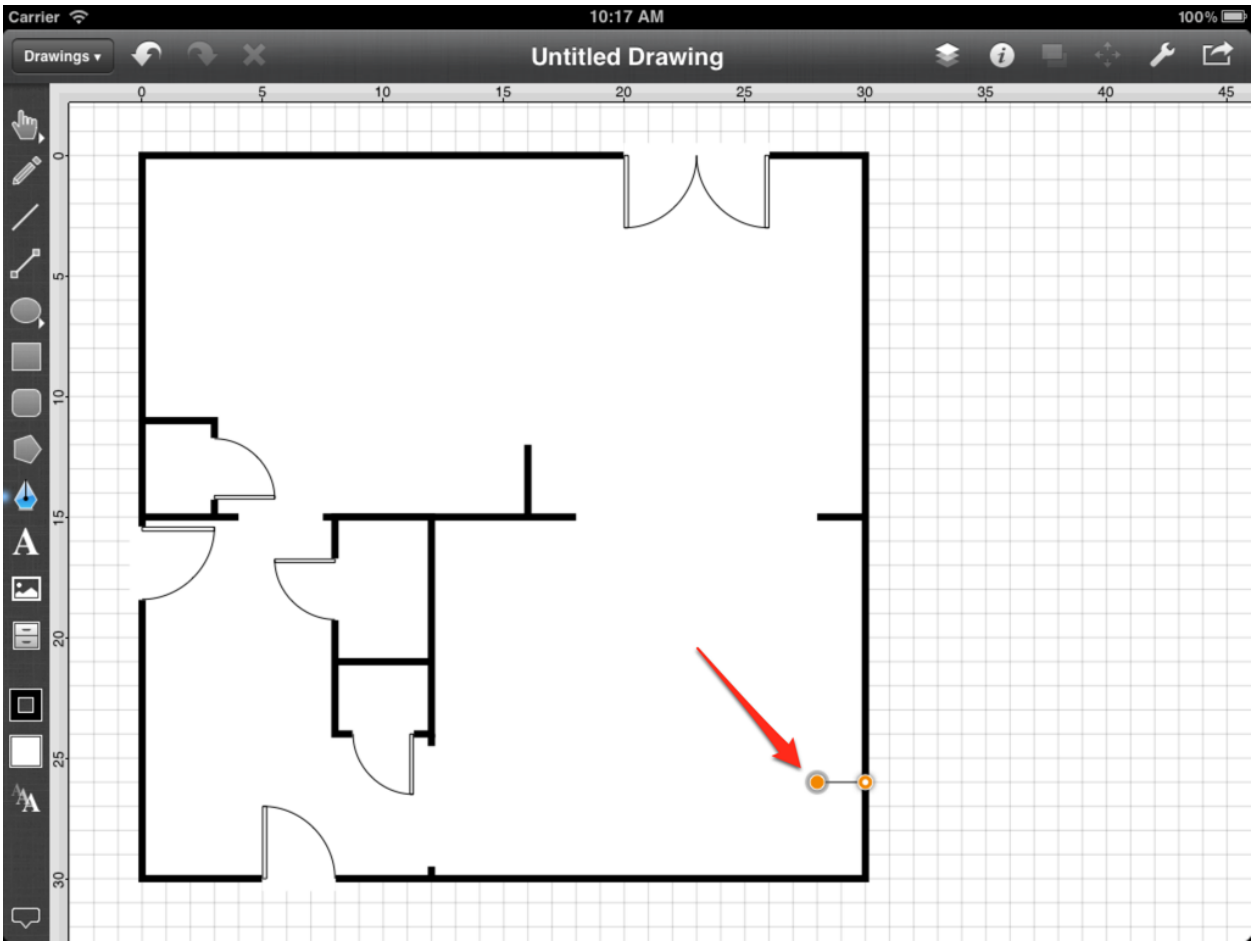
Second, select the **Path Tool** (resembles the tip of a Calligraphy Pen) in the Drawing Toolbar.



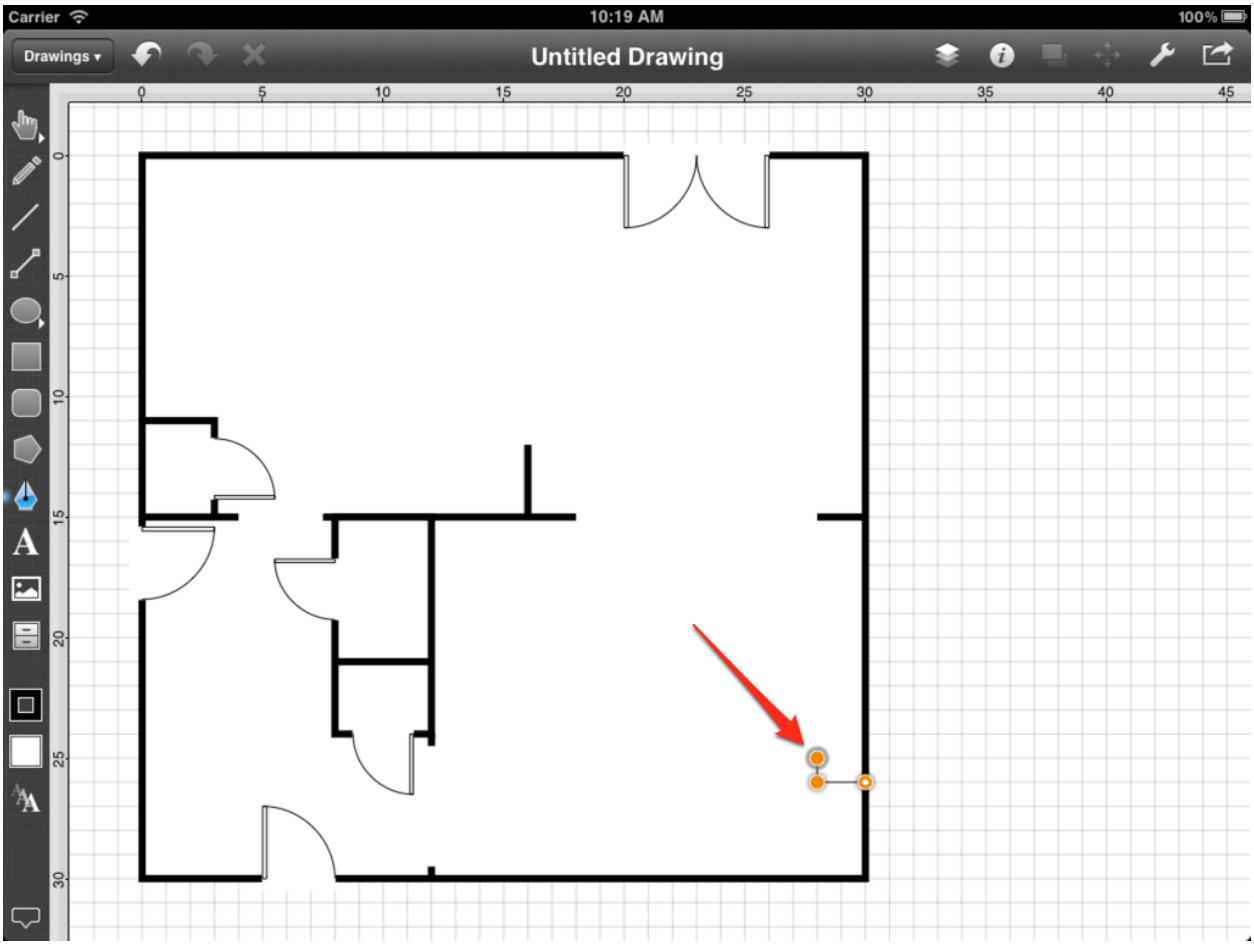
Third, tap on the drawing where the lower right hand corner of the fireplace will go.



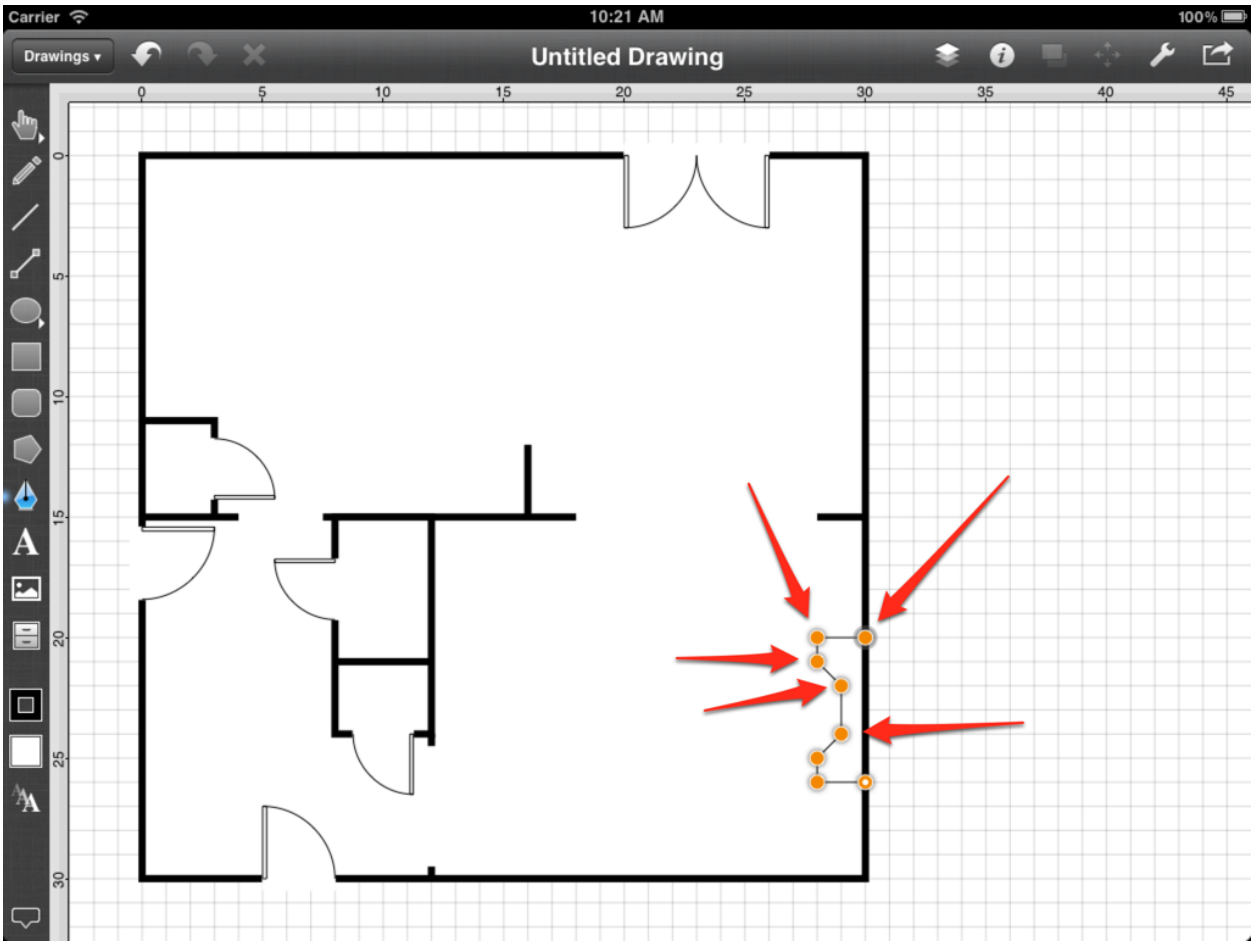
Next, move two feet to the left and tap on the drawing to insert the point for the lower left hand corner.



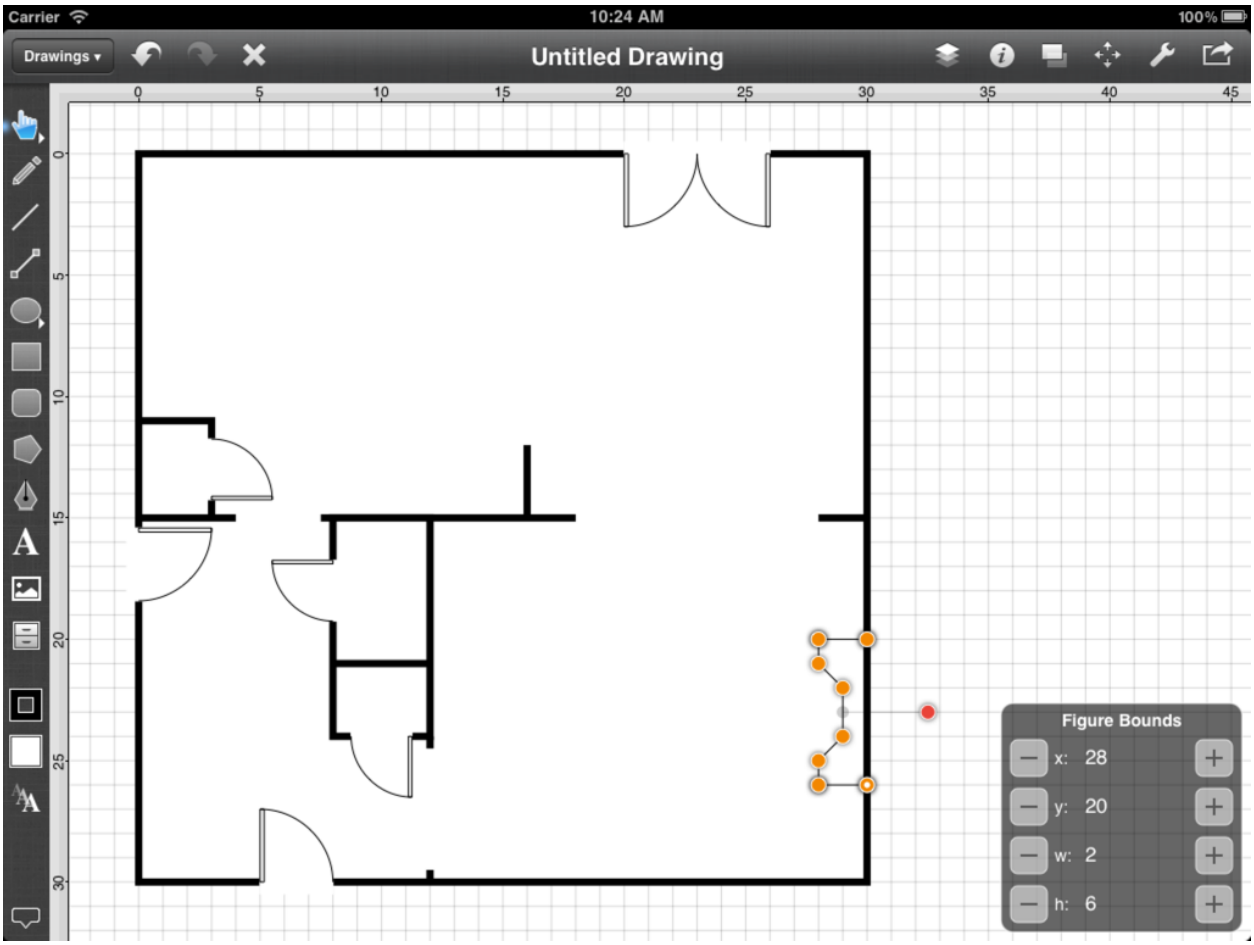
Next, move up 1 foot and add the next point.



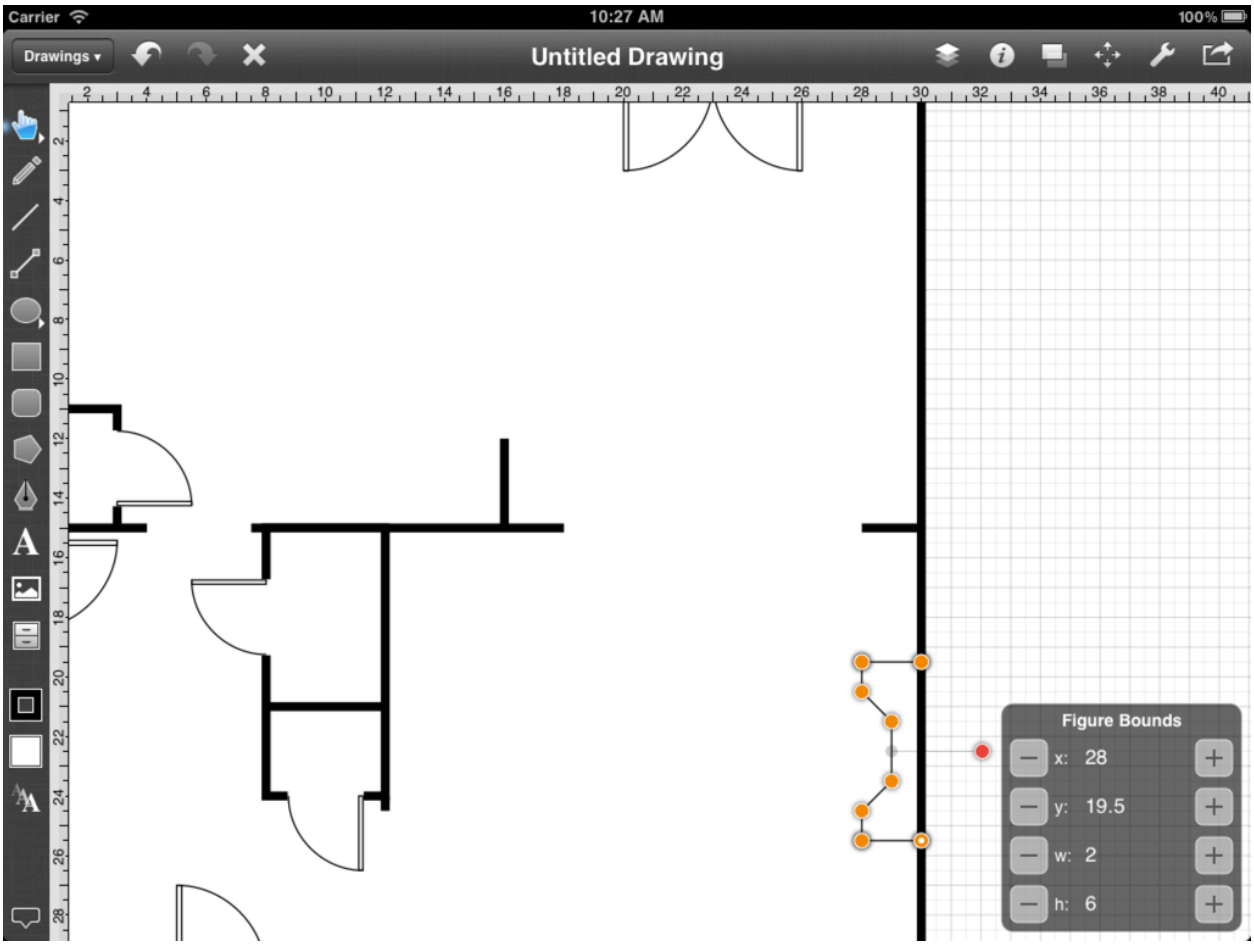
Add the next 5 points of the Fireplace by using the same process.



Next, tap on the starting point to close the path and finish the creation of the fireplace.



The fireplace is not in the correct position and should be 4ft 6in from the lower right hand corner; however, it is currently 4 ft from this corner in the drawing. This is quite easy to remedy in TouchDraw. Either zoom in and drag the shape up half a foot or use the overlay panel to change the shapes Y position from 20 to 19.5.



Continue to Next Step

17. Step 16 - Adding the Stairs Layer

The next step is to create a new layer for the stairs.

As with previous steps where new layers were added, the same process must be followed to create a layer for the **Stairs**.

First, open the Layers Menu.

Second, lock the **Fireplace** layer since no additional changes have to be made.

Third, press on the **Add Layer Button** to create a new layer.

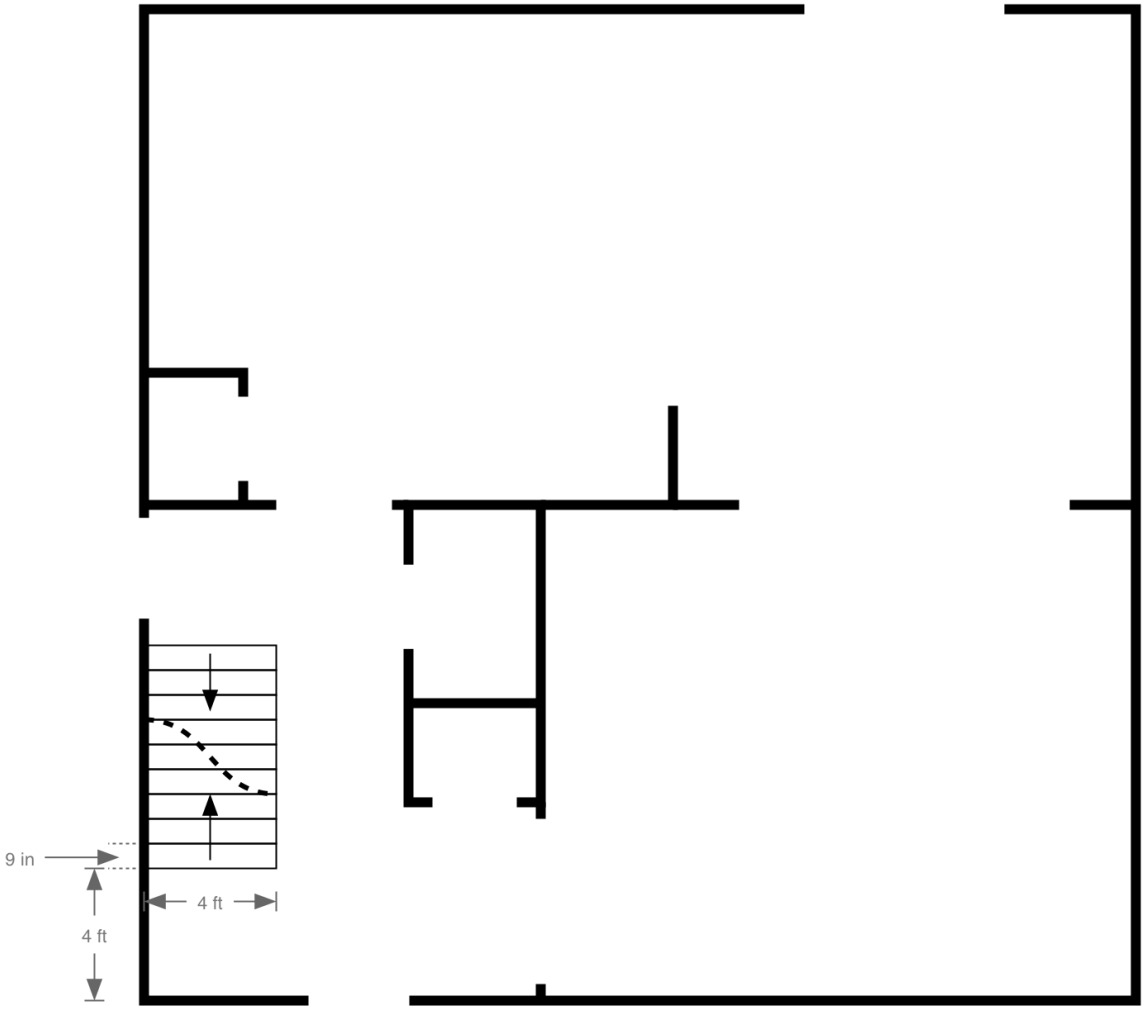
Fourth, as before, press on the **Edit Button** and rename *Layer 6* to **Stairs**.

Lastly, make certain the **Stairs** layer is selected, then dismiss the **Layers Menu** by tapping outside of it.

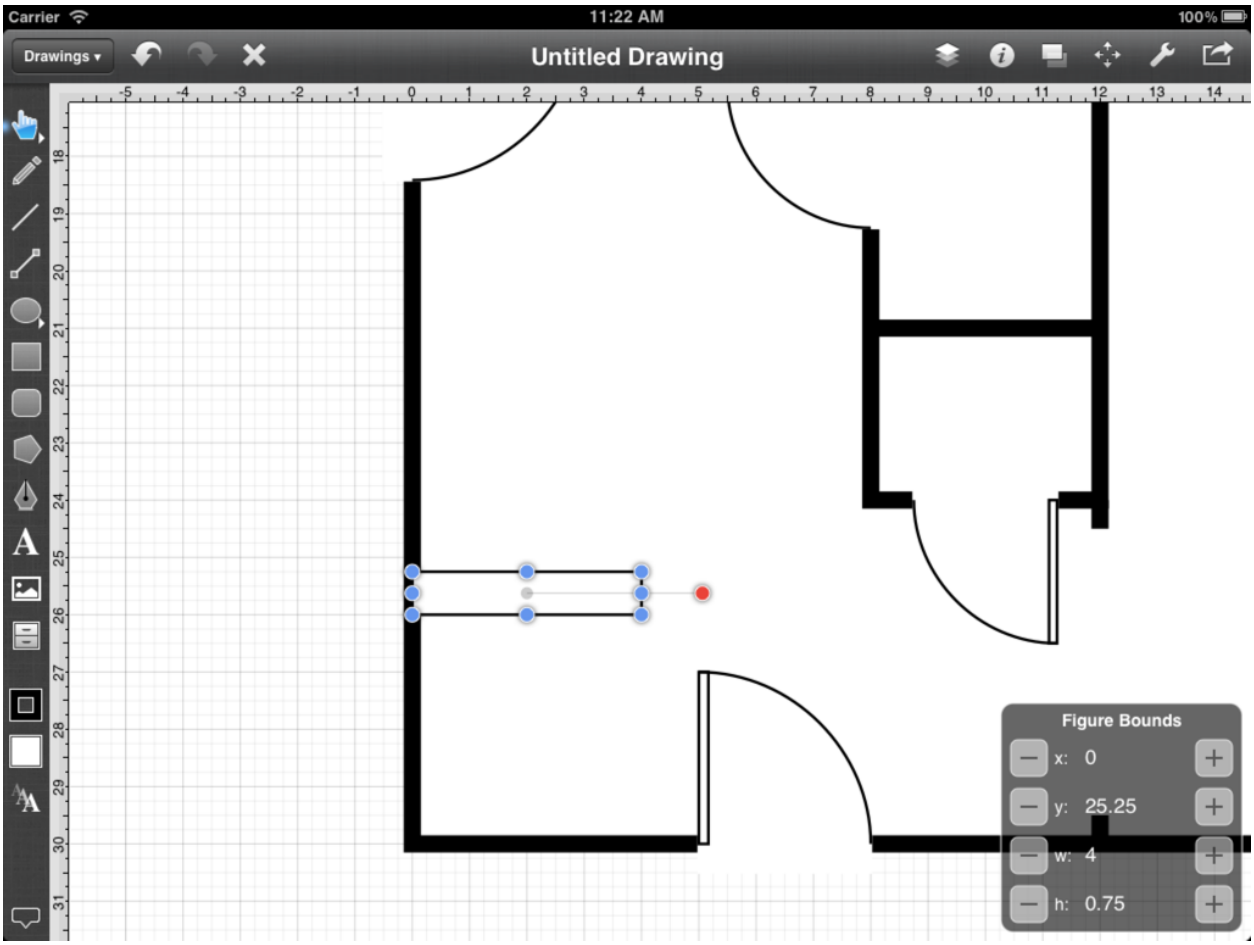
Continue to Next Step

18. Step 17 - Adding the Stairs

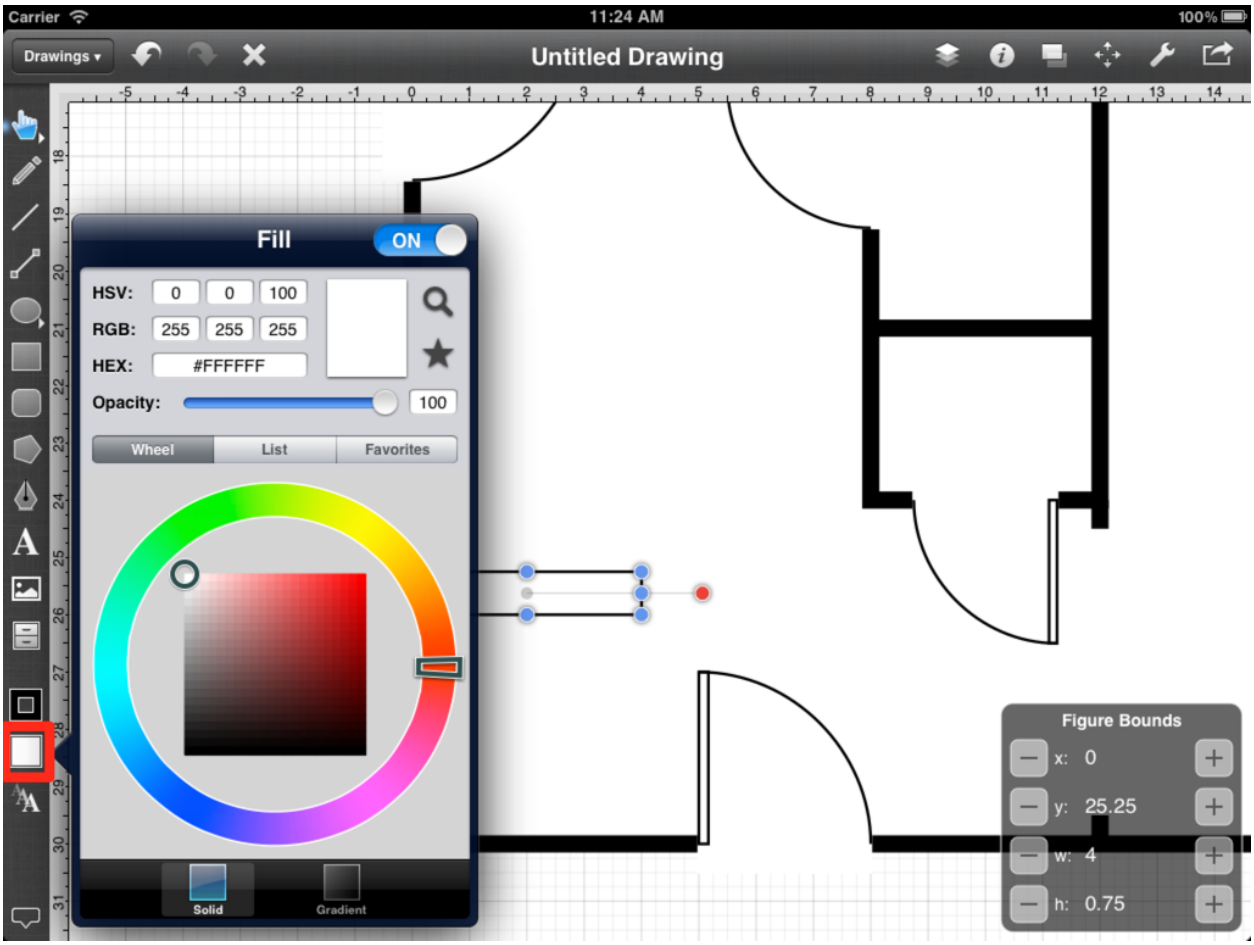
The next step in this tutorial is to add the stairs. First, the following is a drawing showing the dimensions and relative locations of the stairs and can be used as a point of references for dimensions.



First, zoom in on the foyer area to make it easier to create the stairs. As seen in the diagram above, each stair tread is 4 ft wide by 9 in deep. Use the Rectangle Tool to draw the first stair (closest to the front door).

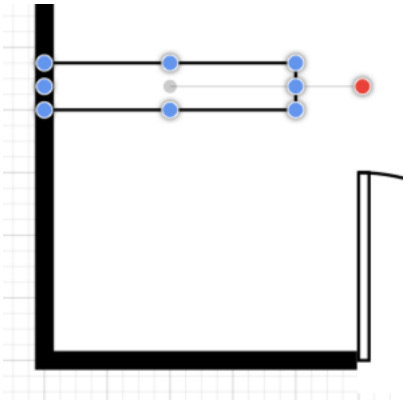


If you look closely, you'll notice that the stairs overlap the exterior walls slightly. Use the Fill Window to turn off the fill for this shape and make it visually cleaner. The **Fill Window** can be accessed by pressing on the button located directly below the **Stroke Button** in the Drawing Toolbar.



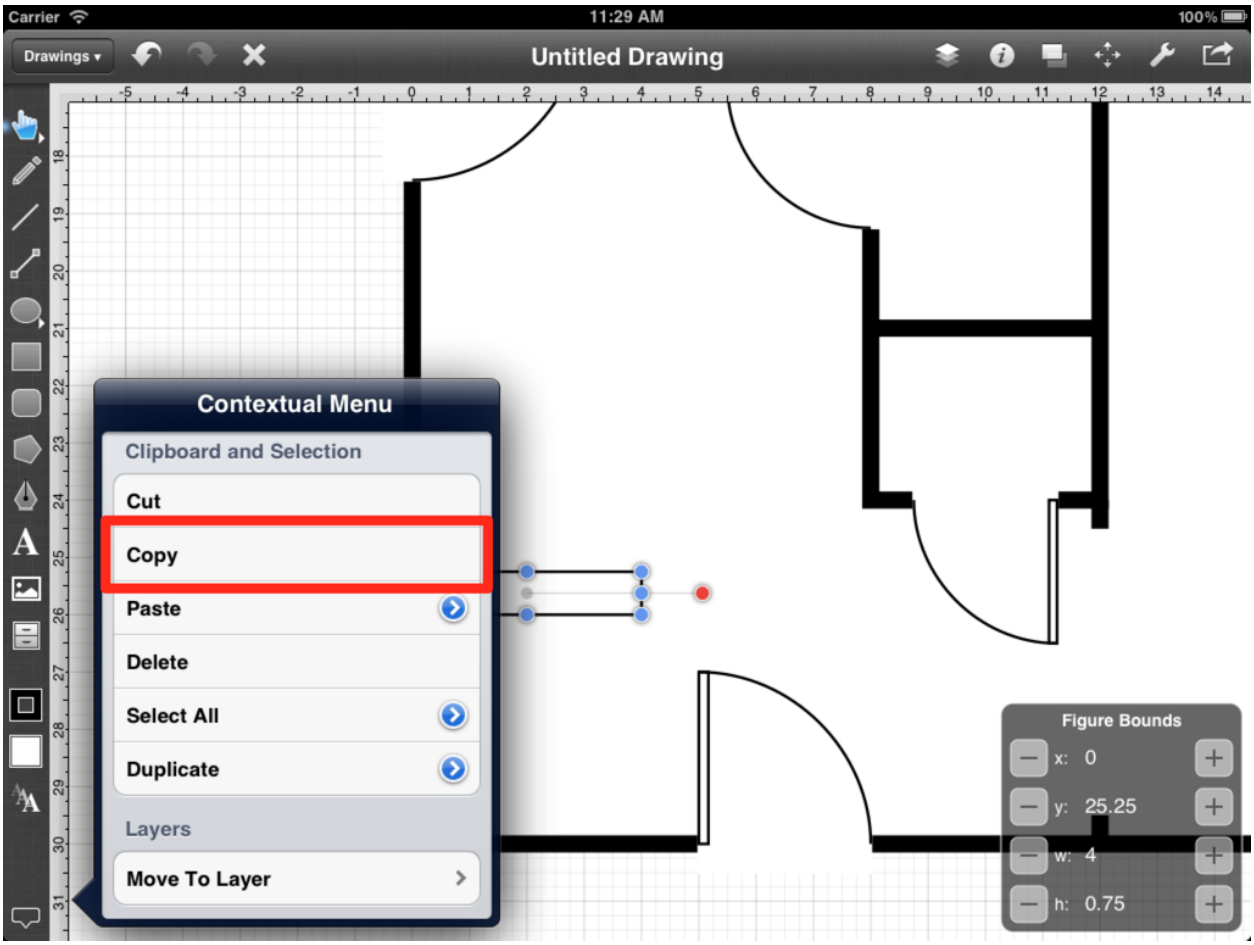
An **On/Off** toggle button can be found in the titlebar of the **Fill Window**.

Toggle the button to **OFF**to cause the drawn rectangle to no longer have a fill color.

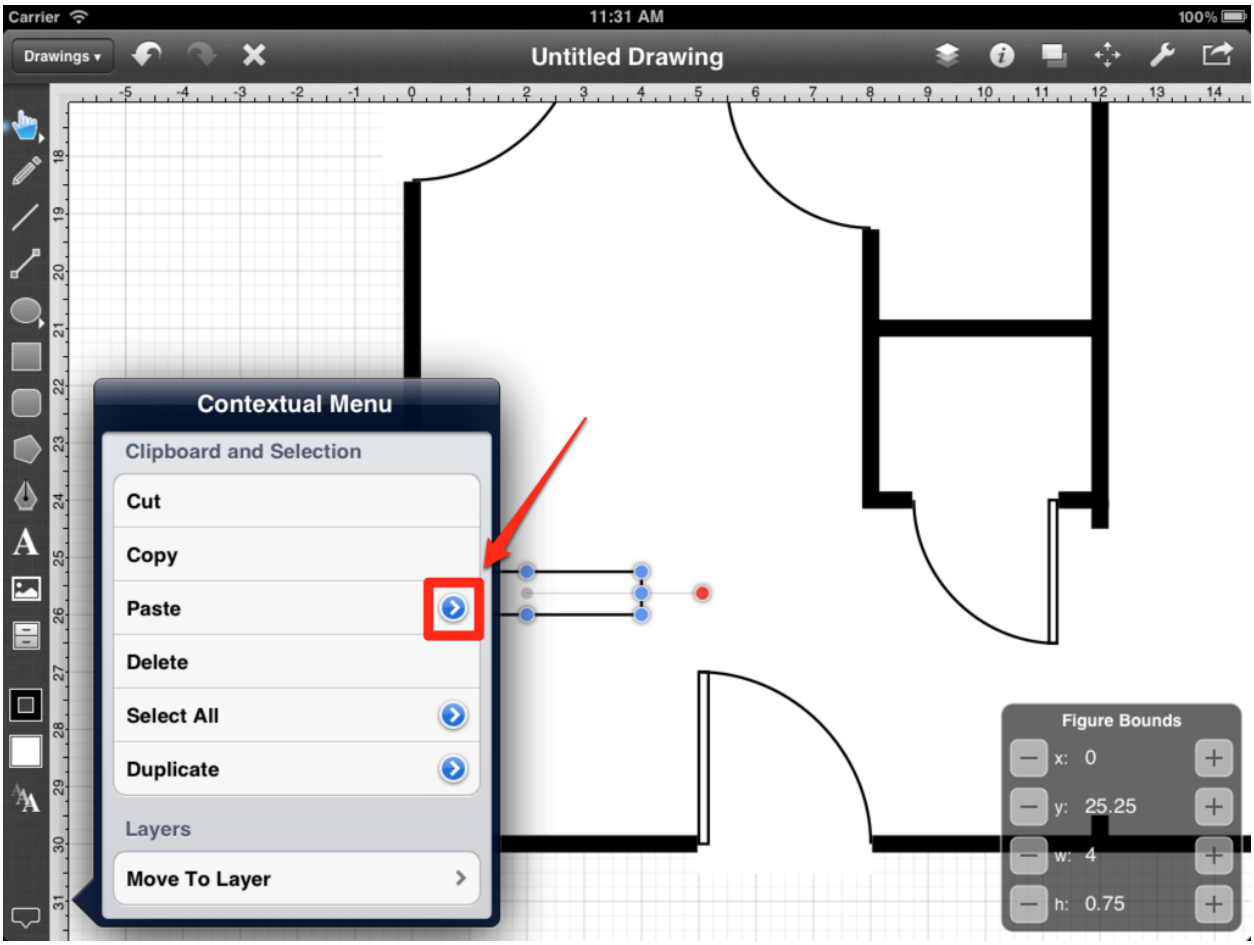


Next, the rest of the stairs need to be drawn. One way would be to simply use the Rectangle Tool to draw the remaining 8 stairs; however, this can be accomplished in a quicker manner within TouchDraw by using the Paste Multiple Copies command.

First, copy the rectangle to the clipboard. As with the Duplicate command, this is done by touching and holding on the shape to bring up the contextual menu or by pressing on the **Contextual Menu Button** in the lower left hand corner of the screen.

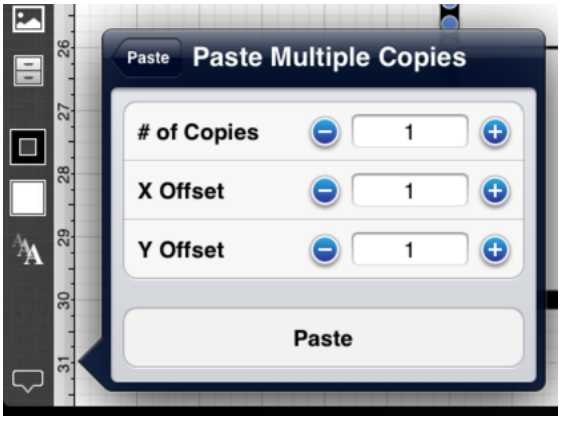


Next, open the contextual menu and navigate to the **Paste Multiple** option. This is accomplished by opening the contextual menu (as explained above) and then pressing on the blue **Disclosure Button** located to the right of the words **Paste**.

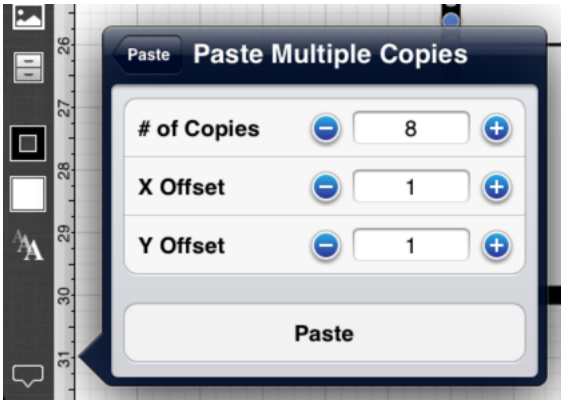


Pressing on the **Disclosure Button** allows for more **Paste** options to be seen.

The option that we're interested in now is the **Paste Multiple Copies** option. Press on it next to see the following options.

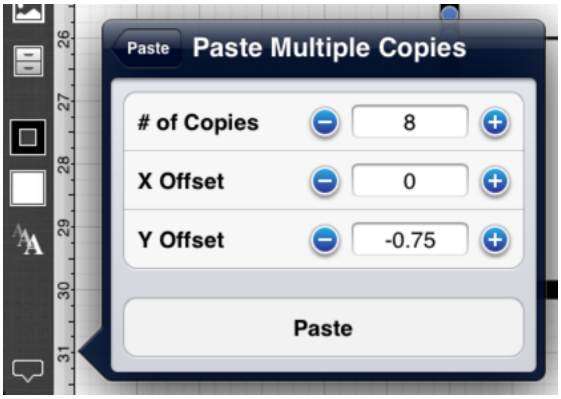


The **Paste Multiple Copies** option allows for a specified number of copies of the shape (or shapes) currently residing to the clipboard to be pasted at specified increments. A total of 8 more steps will need to be inserted in order to create the stairs. The **# of Copies** entry must be changed to 8.

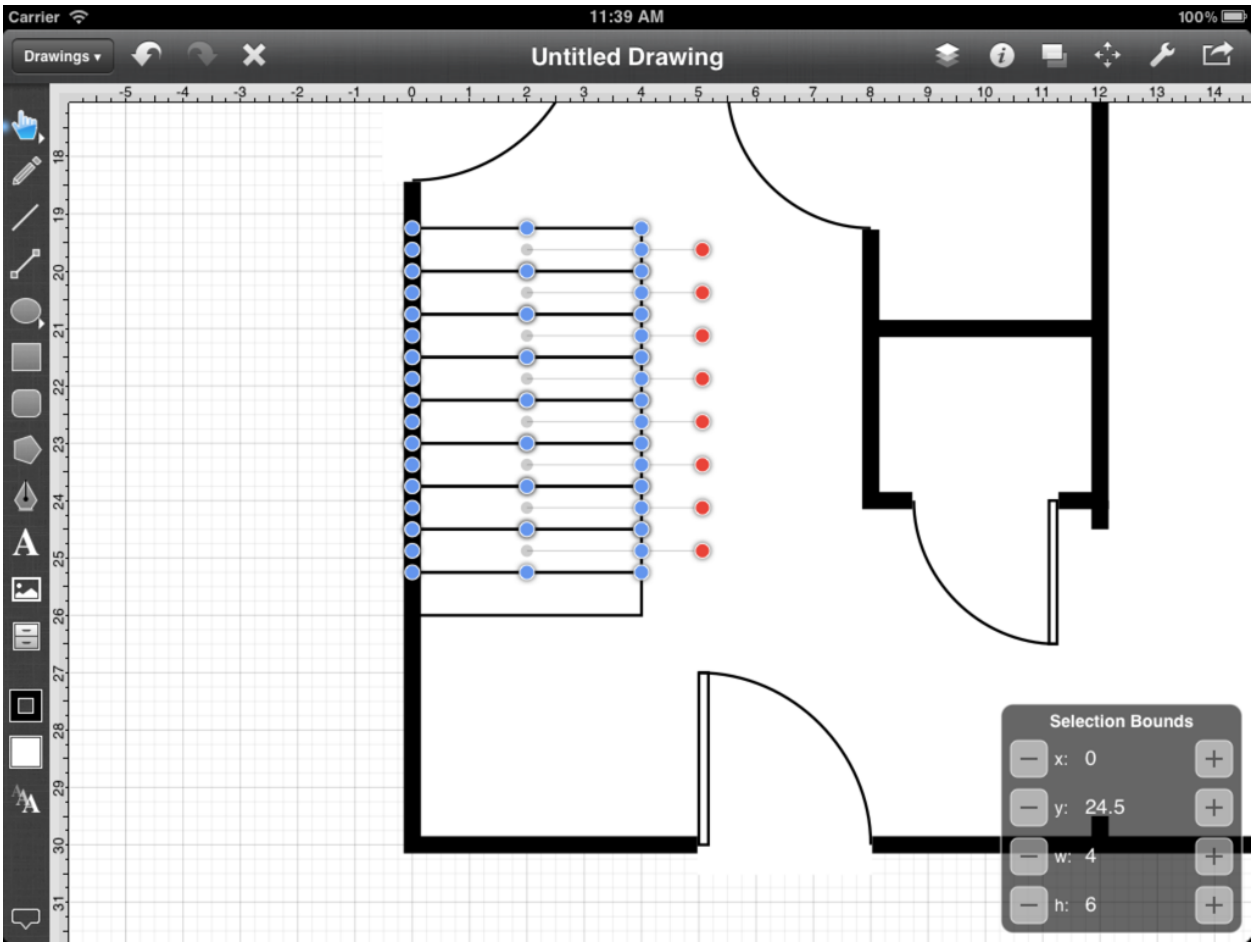


Next, change the **X Offset** field to 0 since the copies will only need to change position vertically from the position of the original shape.

Next, enter -.75 (3/4 of a ft = 9 in) for the **Y Offset** since the steps are 9 inches high and they must be copied upward (in the negative Y axis direction).

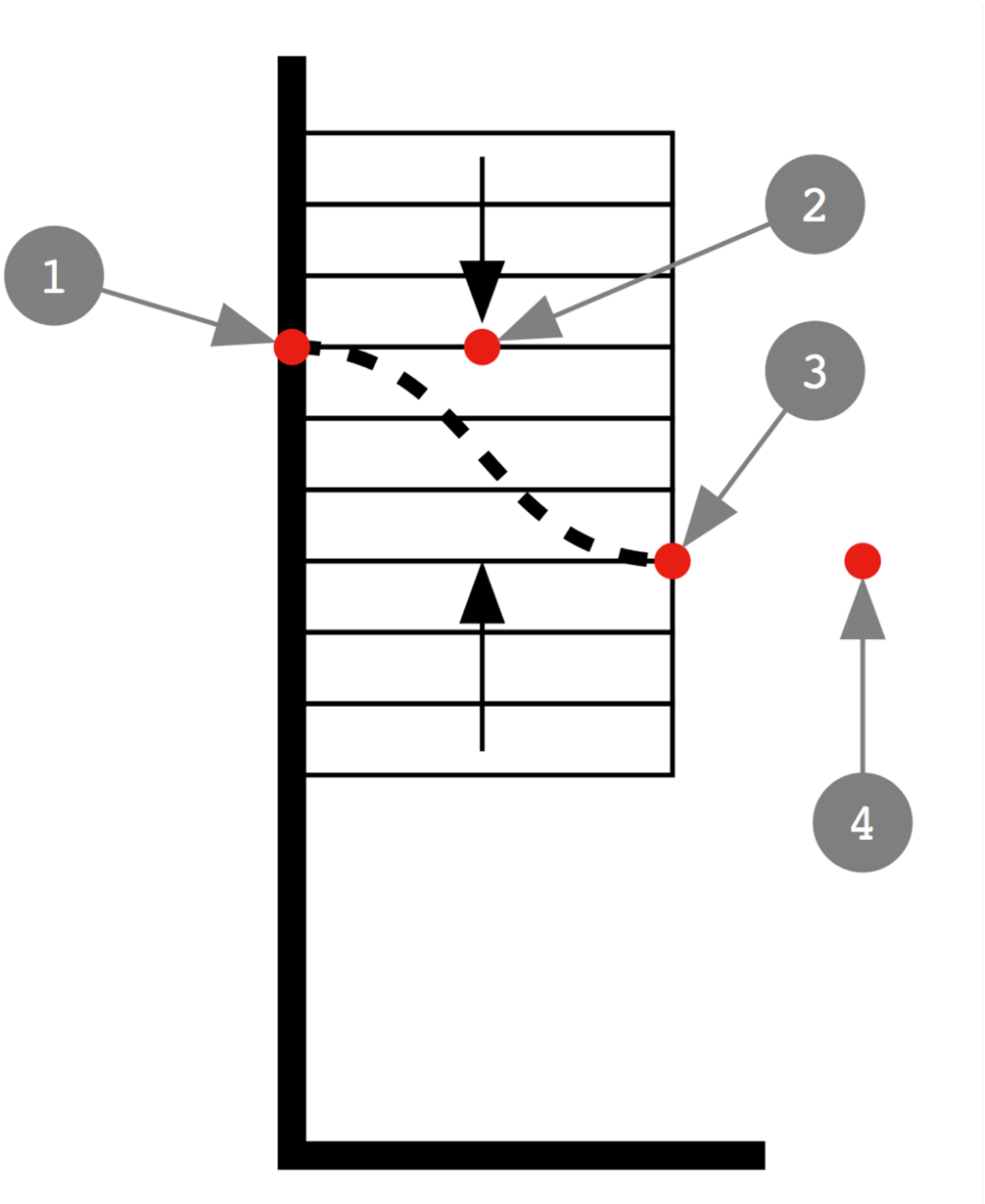


Press on the **Paste Button** to insert the copies.



The next step is to insert the curve which delineates that there are stairs going both up and down in this location and the Path Tool must be used to do this.

Since this is a slightly more complex operation, the steps will first be explained and then a video will show how to do this instead of having screenshots illustrating each step. Here is a diagram showing the points that will be discussed in the explanation:



Here is the explanation on how to create the curve.

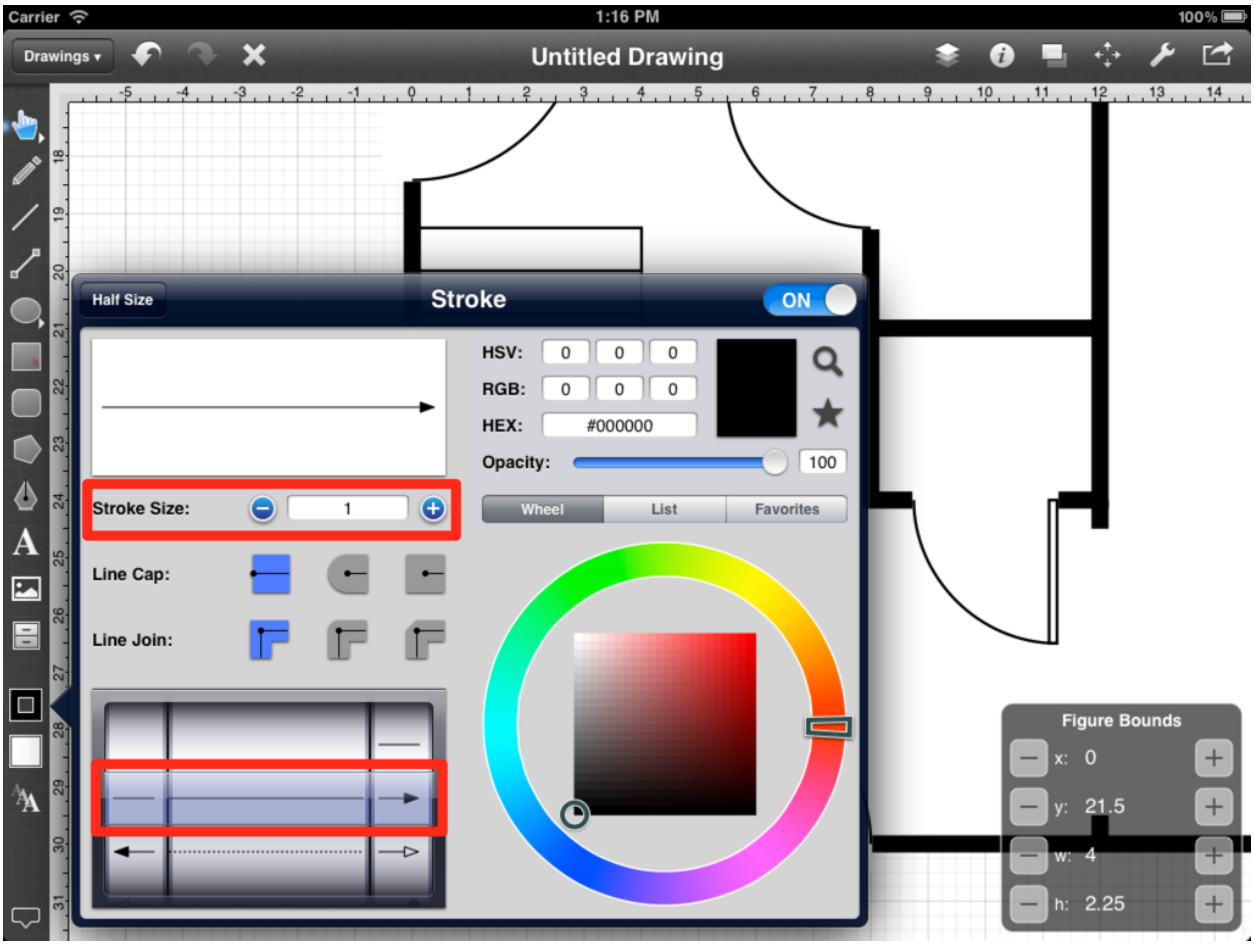
1Select the Path Tool.
2Tap at Point 1 and then drag your finger over to Point 2 before picking your finger up.
3Tap at Point 3 and then drag your finger over to Point 4 before picking your finger up.
4Tap on the Move and Zoom Tool to end the path creation process.
5Select the newly created curve.
6Open the Stroke Window.
7Change the stroke size to 2
8Select dotted line as the line style.

Here is a video demonstrating how to perform the above steps.

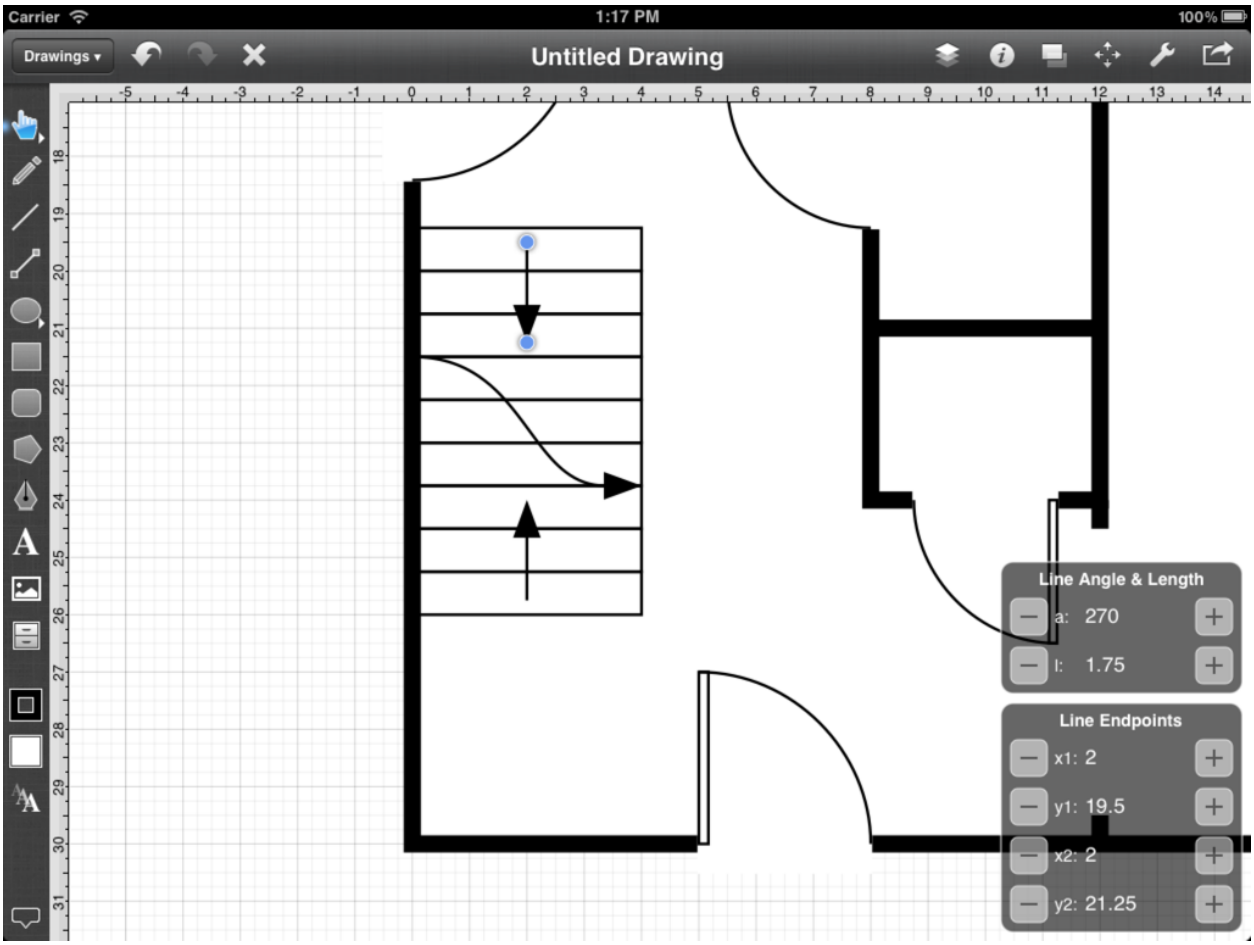
Next, the arrows showing the direction for going up and down the stairs need to be added. The Line Tool can be used to do this; however, the line style will need to be changed before doing so because the stroke size is currently set to 2 and the line is set to a dash pattern.

Note: Make certain the curve is de-selected before changing the stroke settings, otherwise the stroke style of the curve will be changed.

Change the stroke size to 1, change the dash pattern back to solid, and set the end decoration of the line to an arrow within the **Stroke Window**.



The lines can be drawn once the above stroke settings have been changed.



Continue to Next Step

19. Step 18 - Adding the Bathroom Layer

The next step is to create a new layer for adding the bathroom fixtures.

As with previous steps where new layers were added, the same process must be followed to create a layer for the **Bathroom Fixtures**.

First, open the Layers Menu.

Second, lock the **Stairs** layer since no additional changes will be made.

Third, press on the **Add Layer Button** to create a new layer.

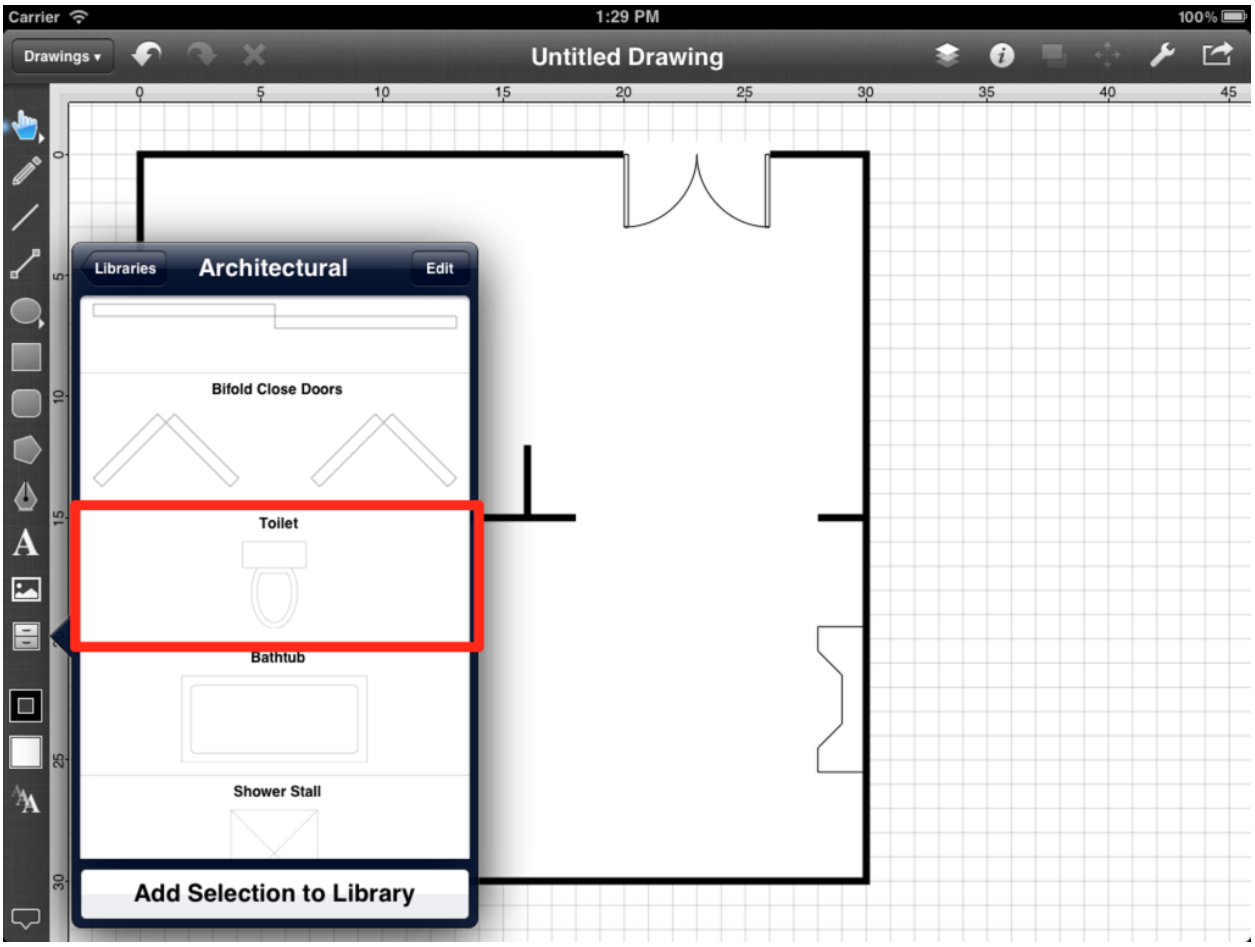
Fourth, as before, press on the **Edit Button** and rename *Layer 7* to **Bathroom Fixtures**.

Lastly, make certain the **Bathroom Fixtures** layer is selected and then dismiss the **Layers Menu** by tapping outside of it.

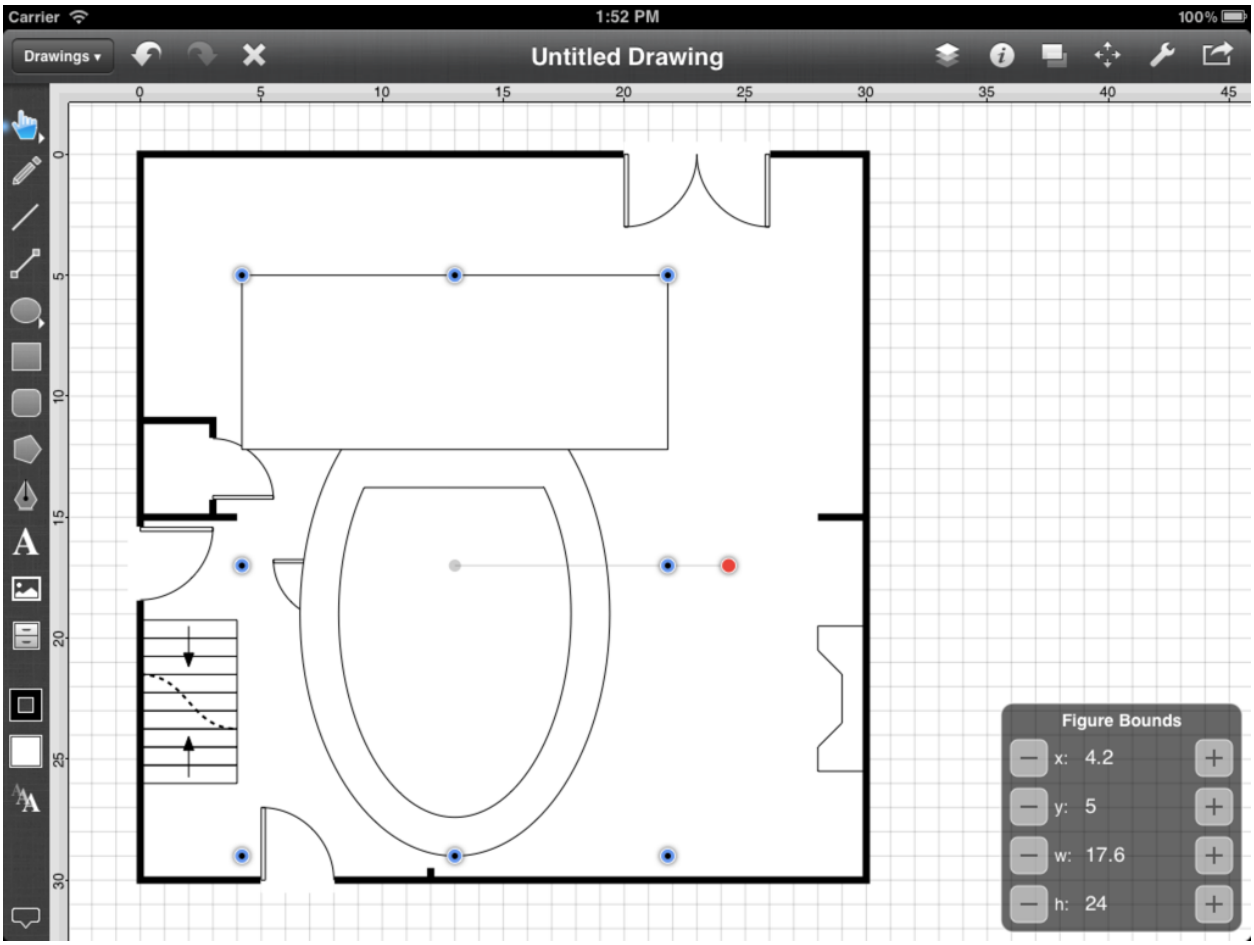
Continue to Next Step

20. Step 19 - Adding the Bathroom Fixtures

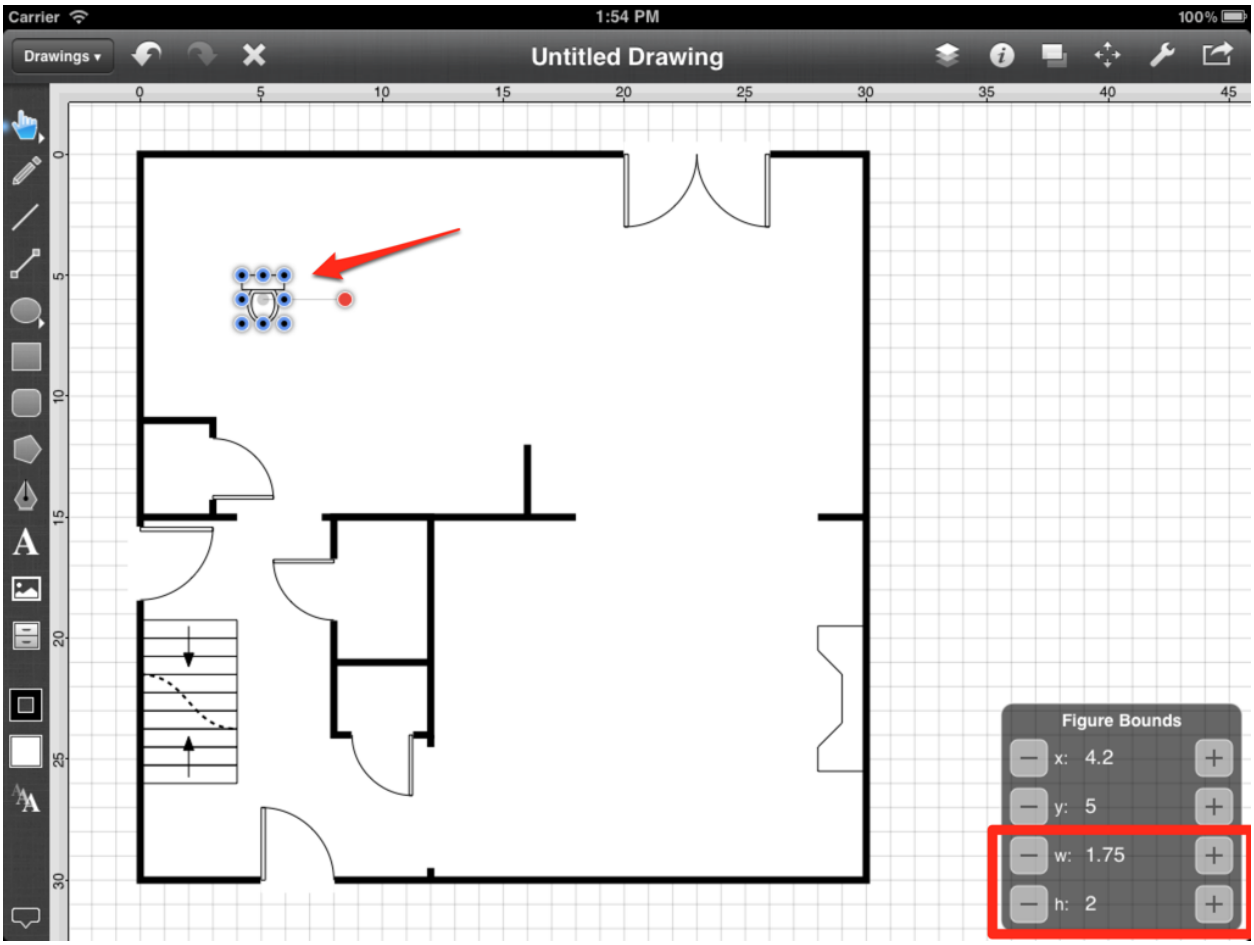
Adding a toilet to the floor plan is similar to the process of inserting doors into a drawing. This is accomplished by selecting a toilet from the **Architectural** stencil library and inserting it into the drawing.



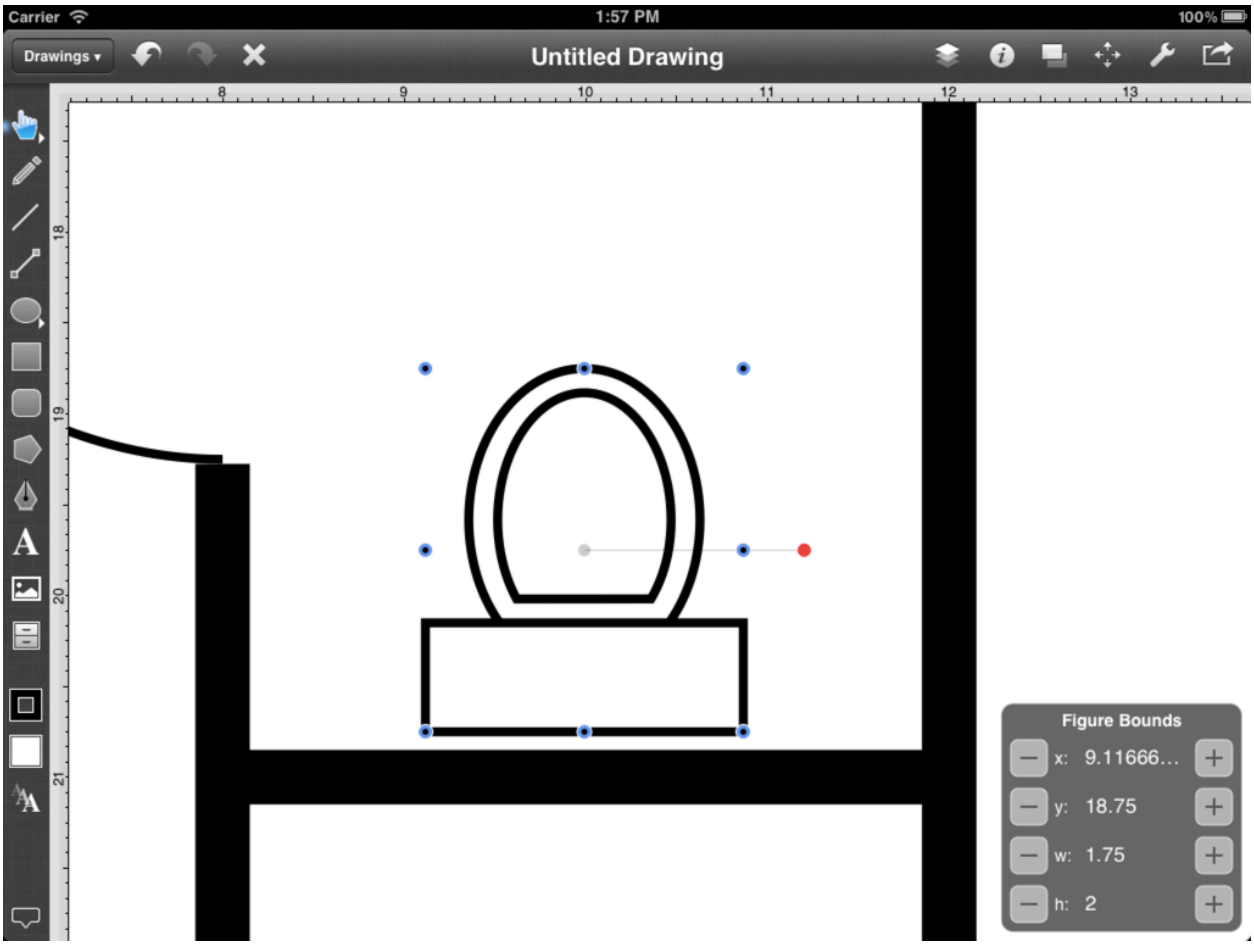
The following screenshot shows how the drawing will apear after the toilet has been inserted.



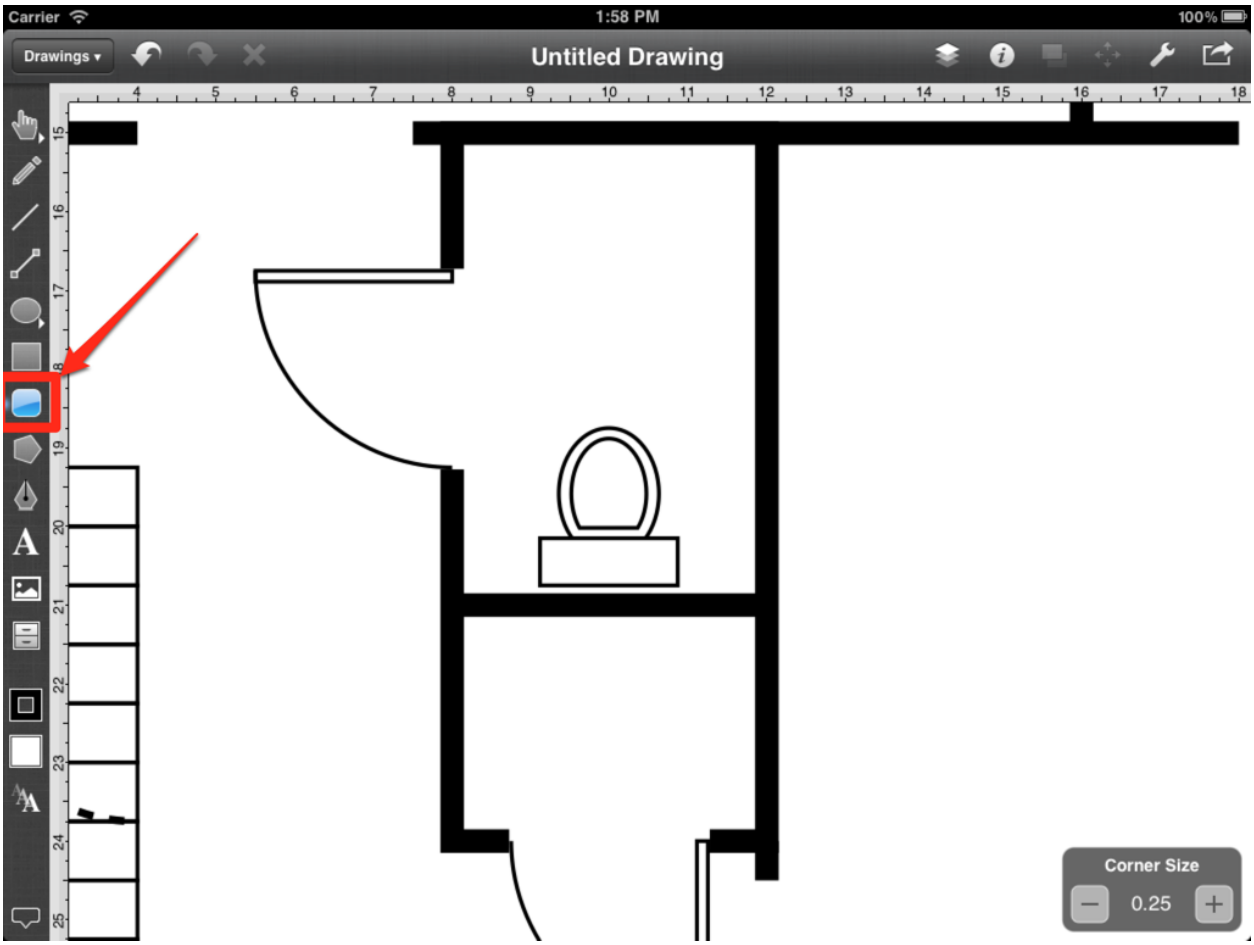
As with the door, the toilet is not scaled correctly due to changes made to the Dots per Unit setting in an earlier step. As before, this is quickly remedied. Use the Overlay Tool to edit the width of the toilet to 1.75 and the height to 2.



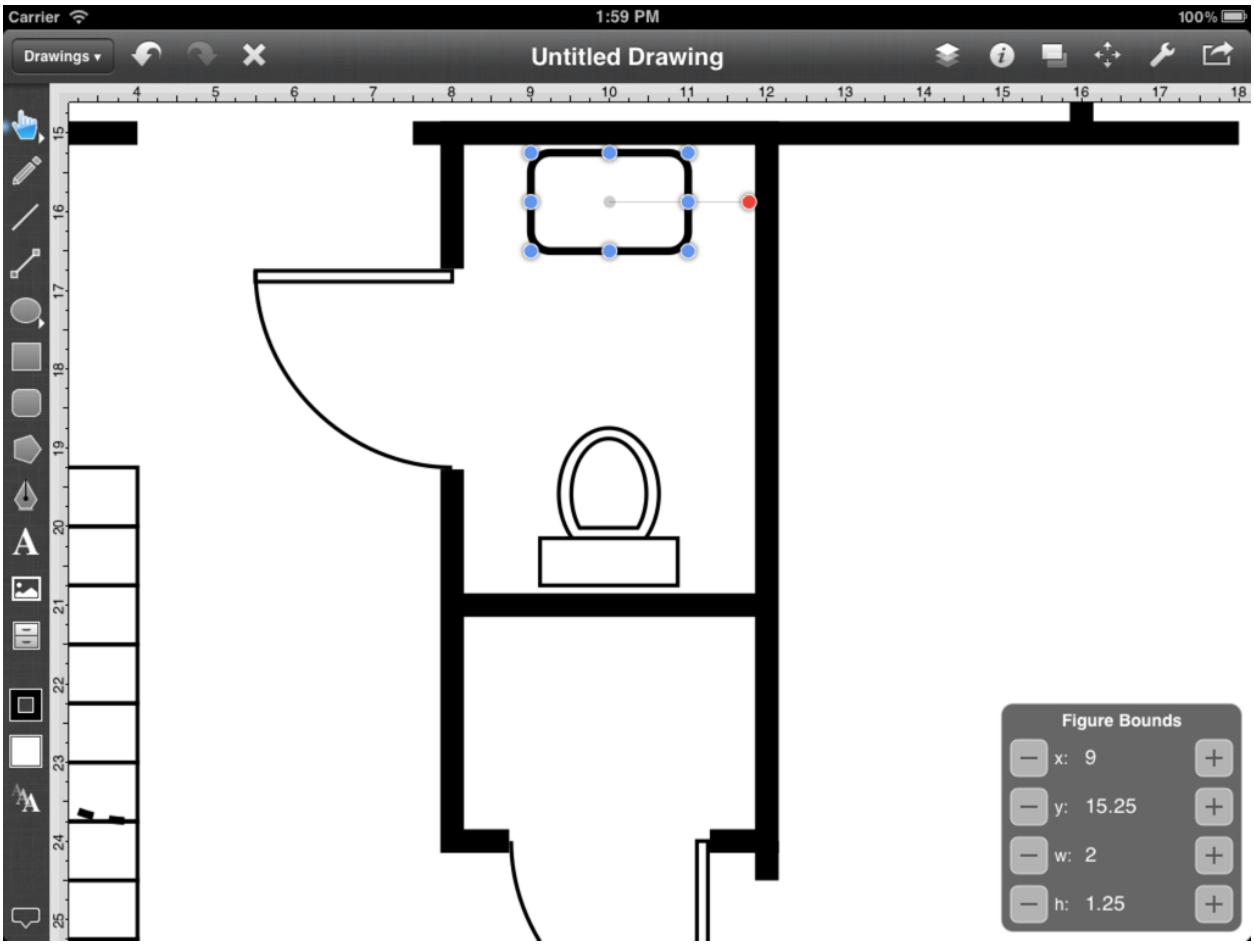
Next, the toilet will either need to be rotated by 180 degrees by using the Rotate 180° command or flipped with the Flip Vertical command in the Adjustment Menu since it is facing the wrong direction. Drag the toilet into place after it has been rotated or flipped.



Next, use the Rounded Rectangle Tool to draw a sink for the bathroom. The **Rounded Rectangle Tool** is located below the Rectangle Tool in the Drawing Toolbar.



Draw the sink after the tool has been selected.



Continue to Next Step

21. Step 20 - Adding the Kitchen Layer

The next step is to create a new layer in the drawing for the **Kitchen**.

As with previous steps where new layers were added, the same process must be followed to create a layer for the kitchen.

First, open the Layers Menu.

Second, lock the **Bathroom Fixtures** layer since no additional changes will have to be made.

Third, press on the **Add Layer Button** to create a new layer.

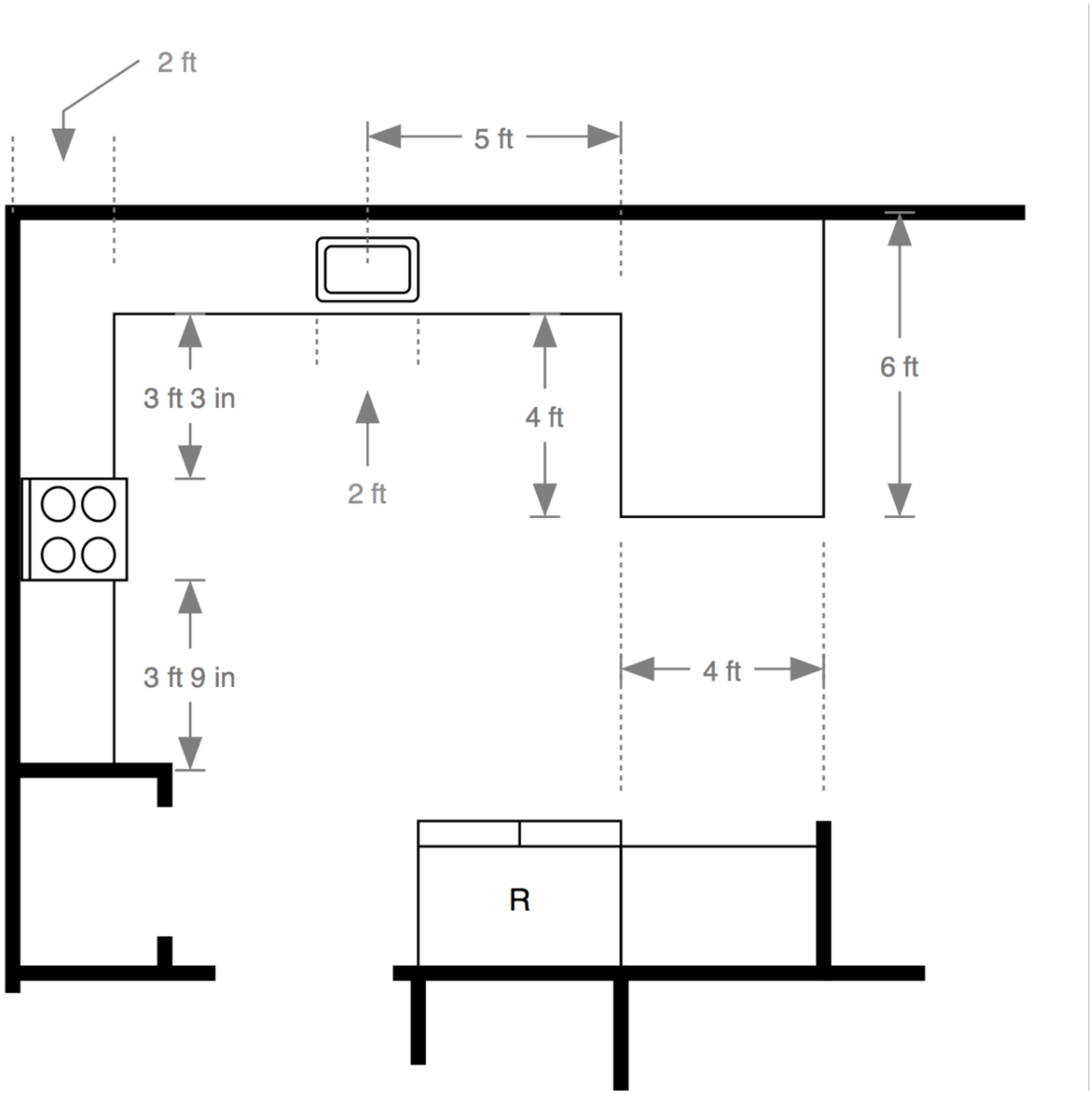
Fourth, as before, press on the **Edit Button** and rename *Layer 8* to **Kitchen**.

Lastly, make certain the **Kitchen** layer is selected and then dismiss the **Layers Menu** by tapping outside of it.

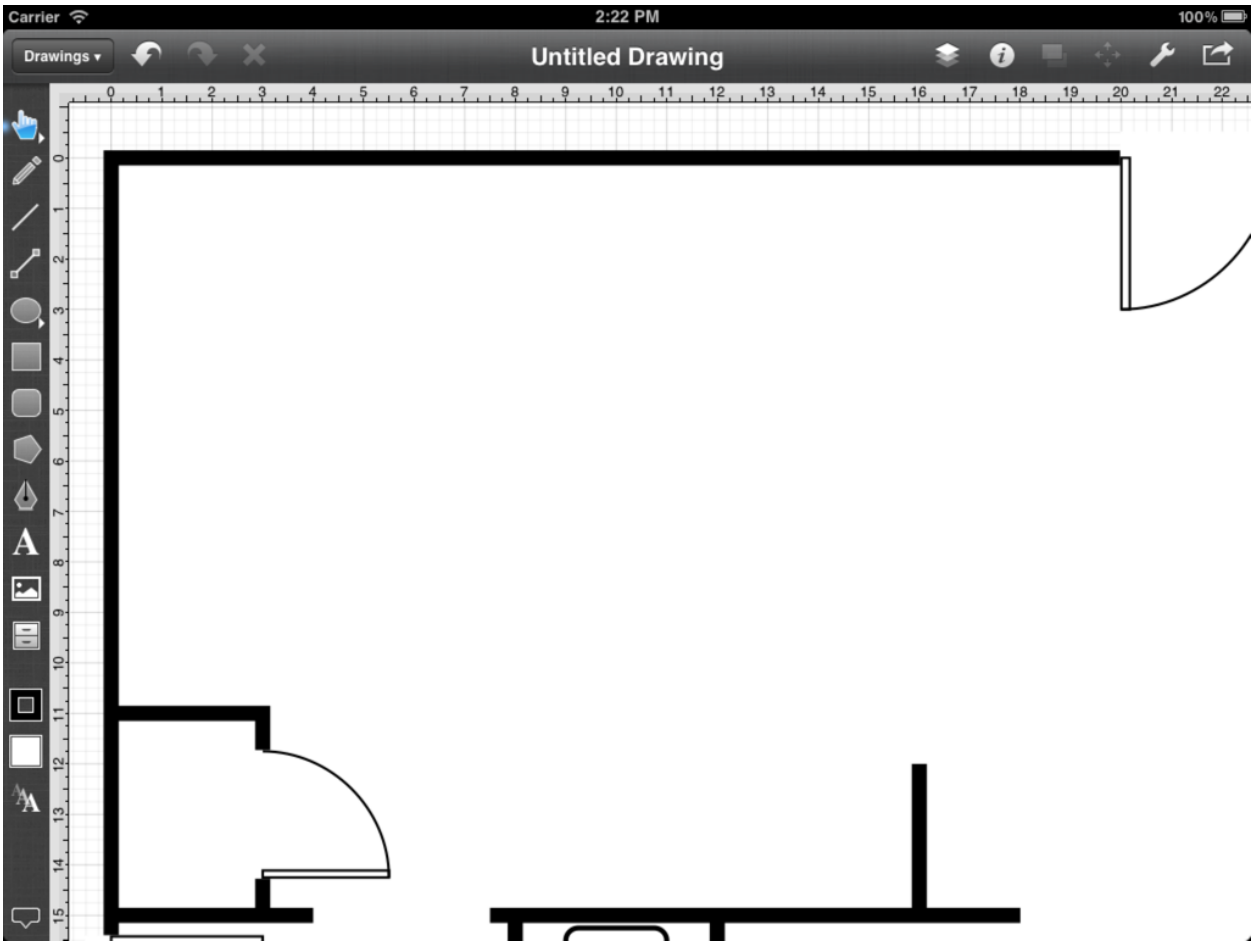
Continue to Next Step

22. Step 21 - Adding the Countertops

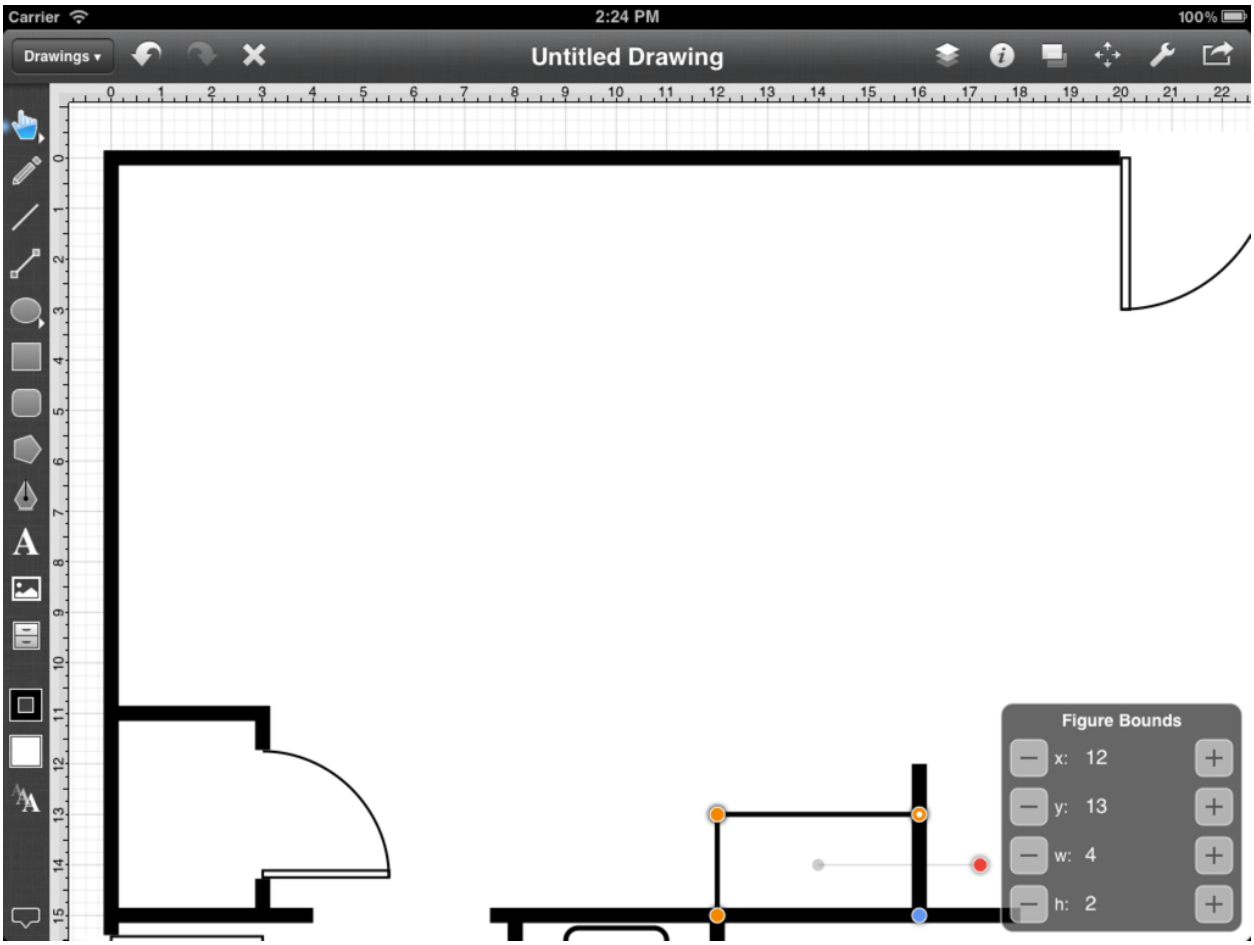
Adding the countertops is the first step required to complete the kitchen portion of the drawing. The following diagram outlines the dimensions of everything that is needed to complete the kitchen:



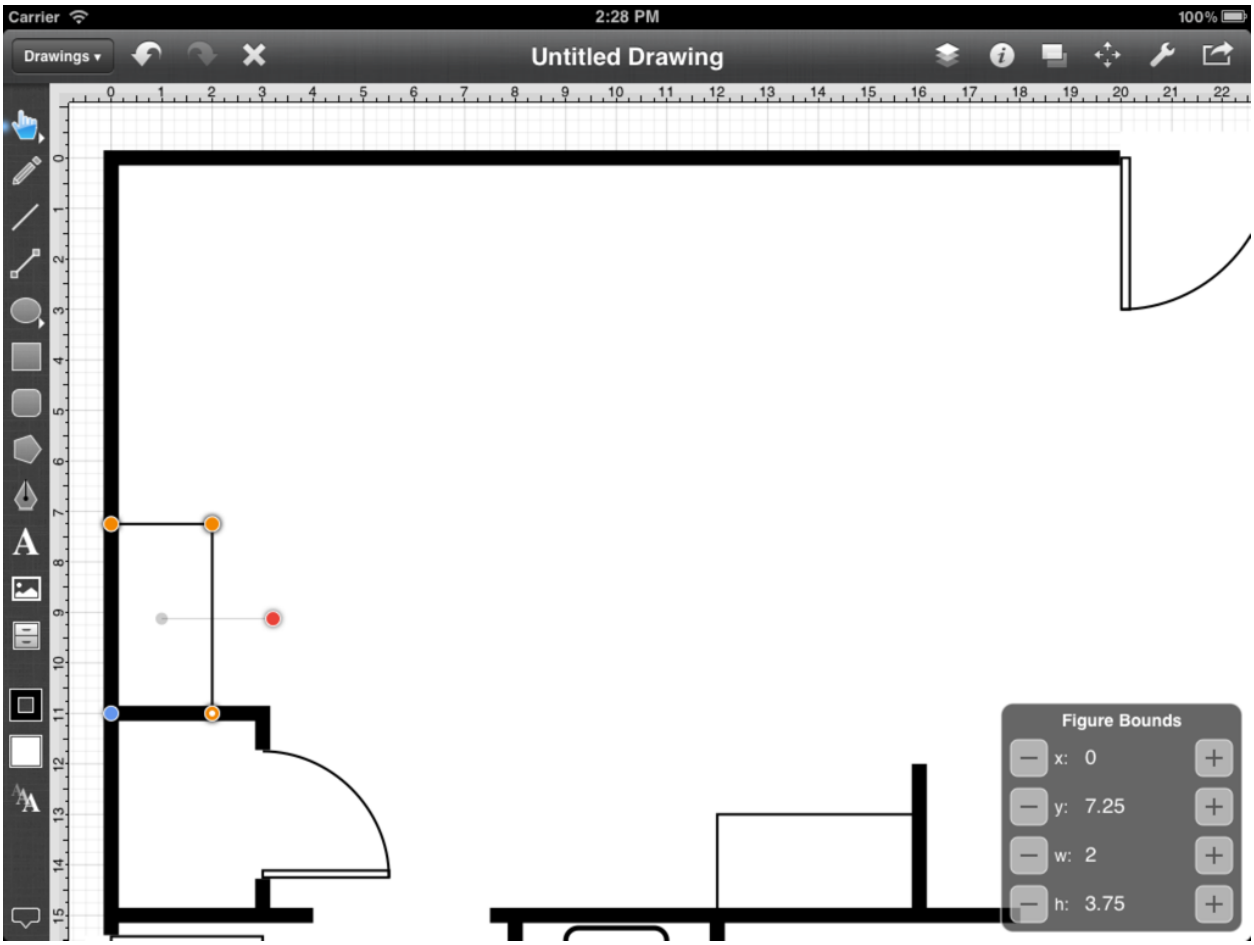
First, zoom in on the kitchen.



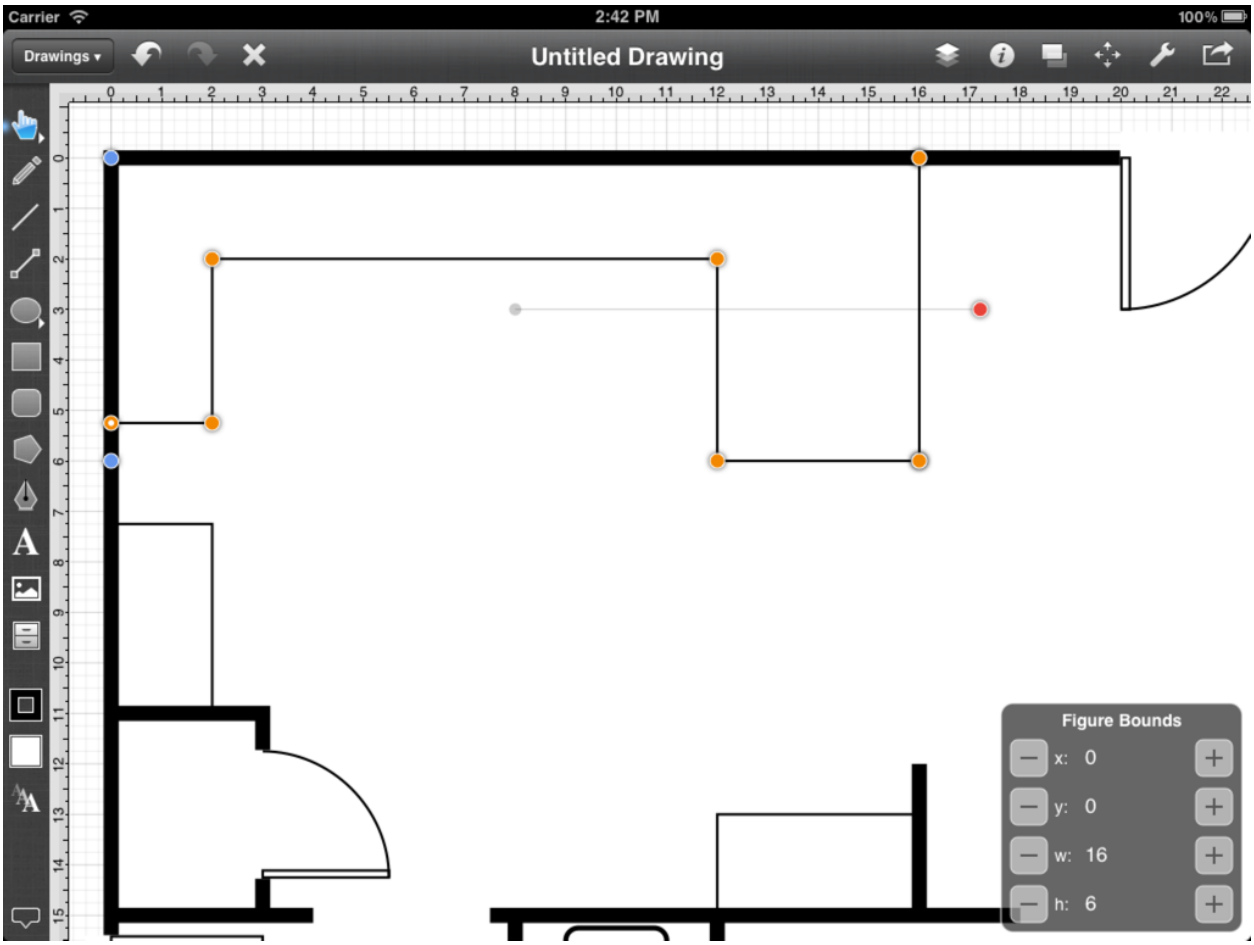
Next, use the Path Tool to add the each countertop section. Start by adding the smallest countertop, which is located next to the refridgerator.



Next, draw the countertop located next to the kitchen closet.



Finally, draw the large countertop.



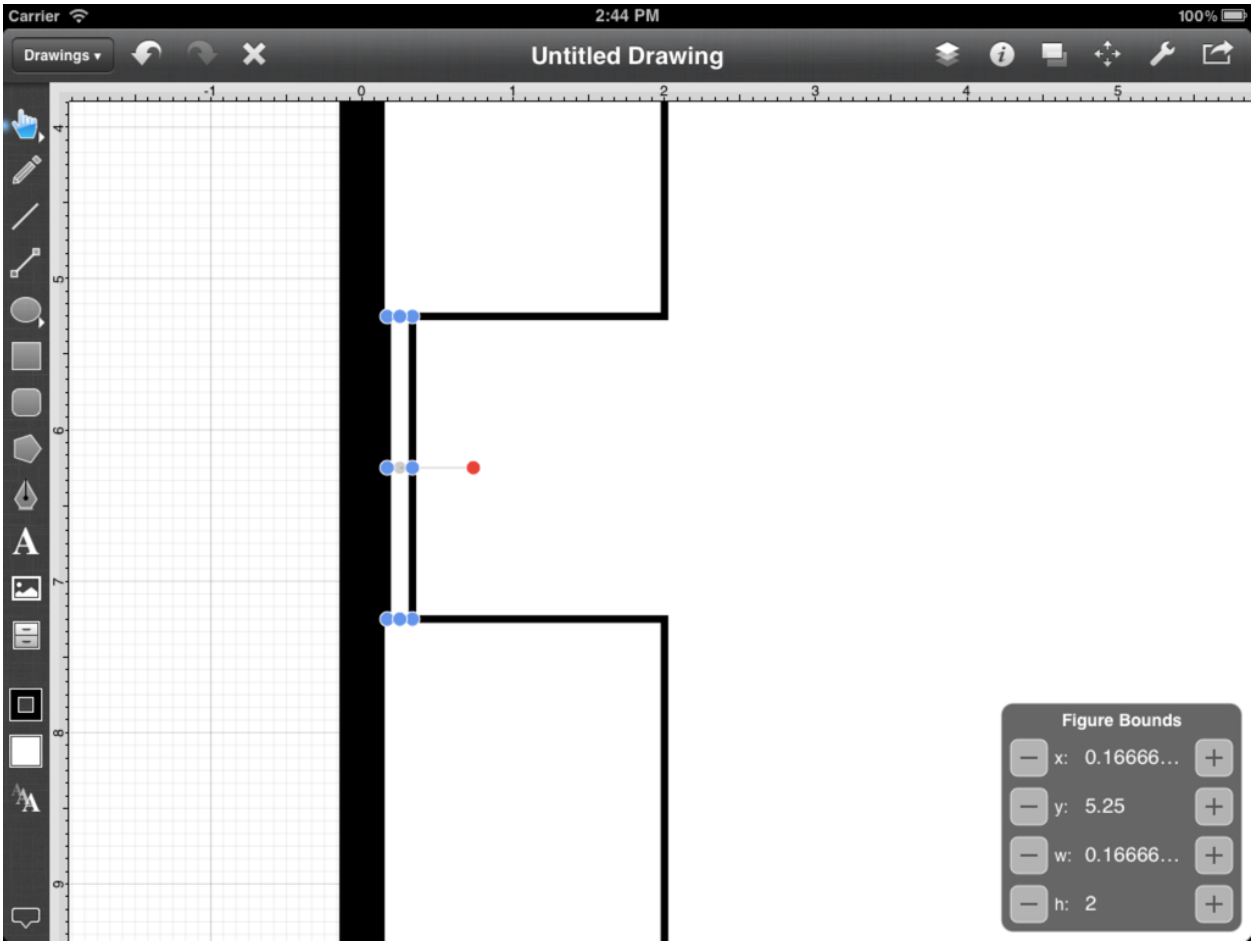
Continue to Next Step

23. Step 22 - Adding the Appliances

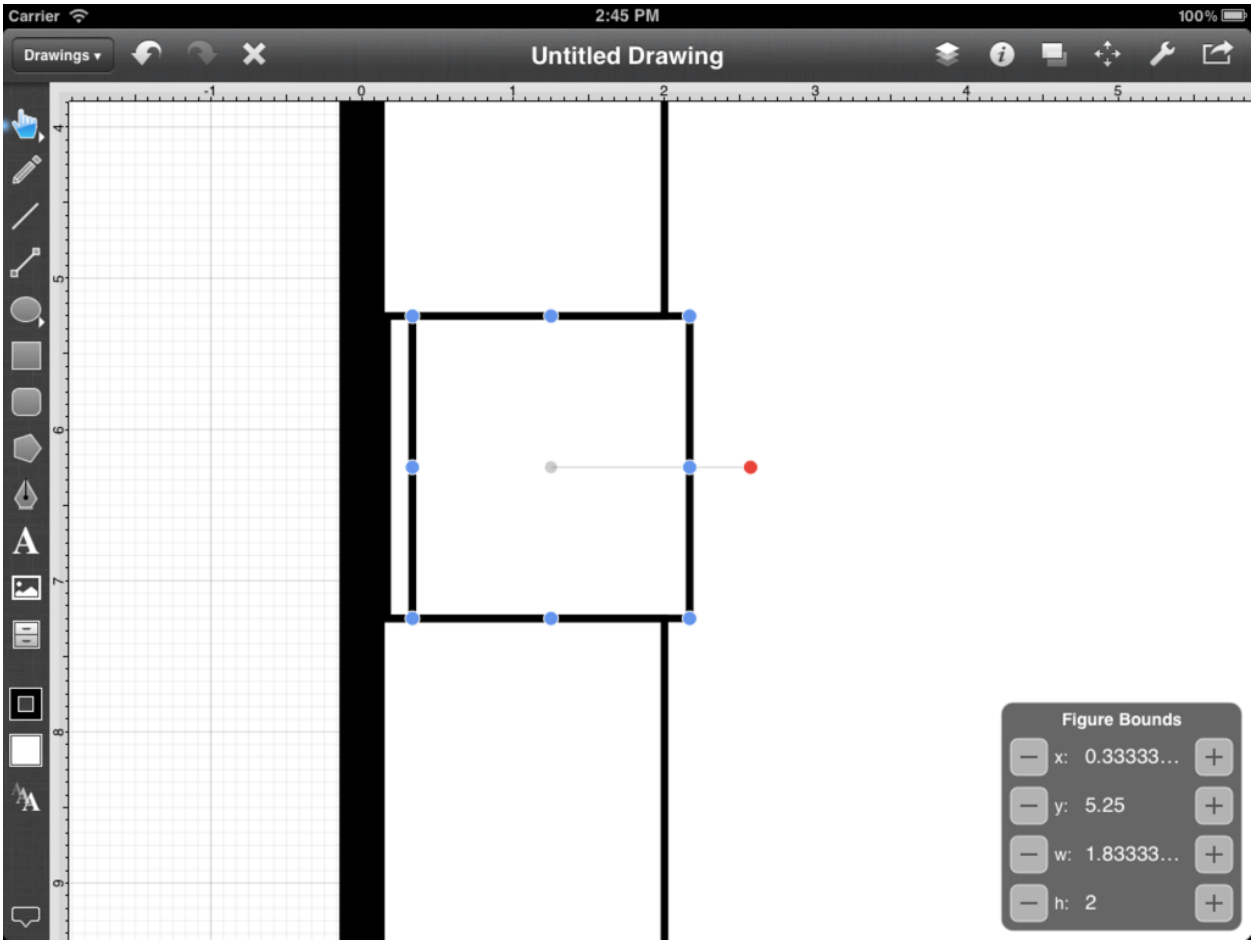
The next step in creating the kitchen is to add the appliances.

While some appliances are included in the architectural library, it is also easy to create these shapes using the drawing tools provided within the TouchDraw application. In the following steps, the stove and refrigerators are added by using tools in the Drawing Toolbar to demonstrate how these shapes can be created without making a library selection.

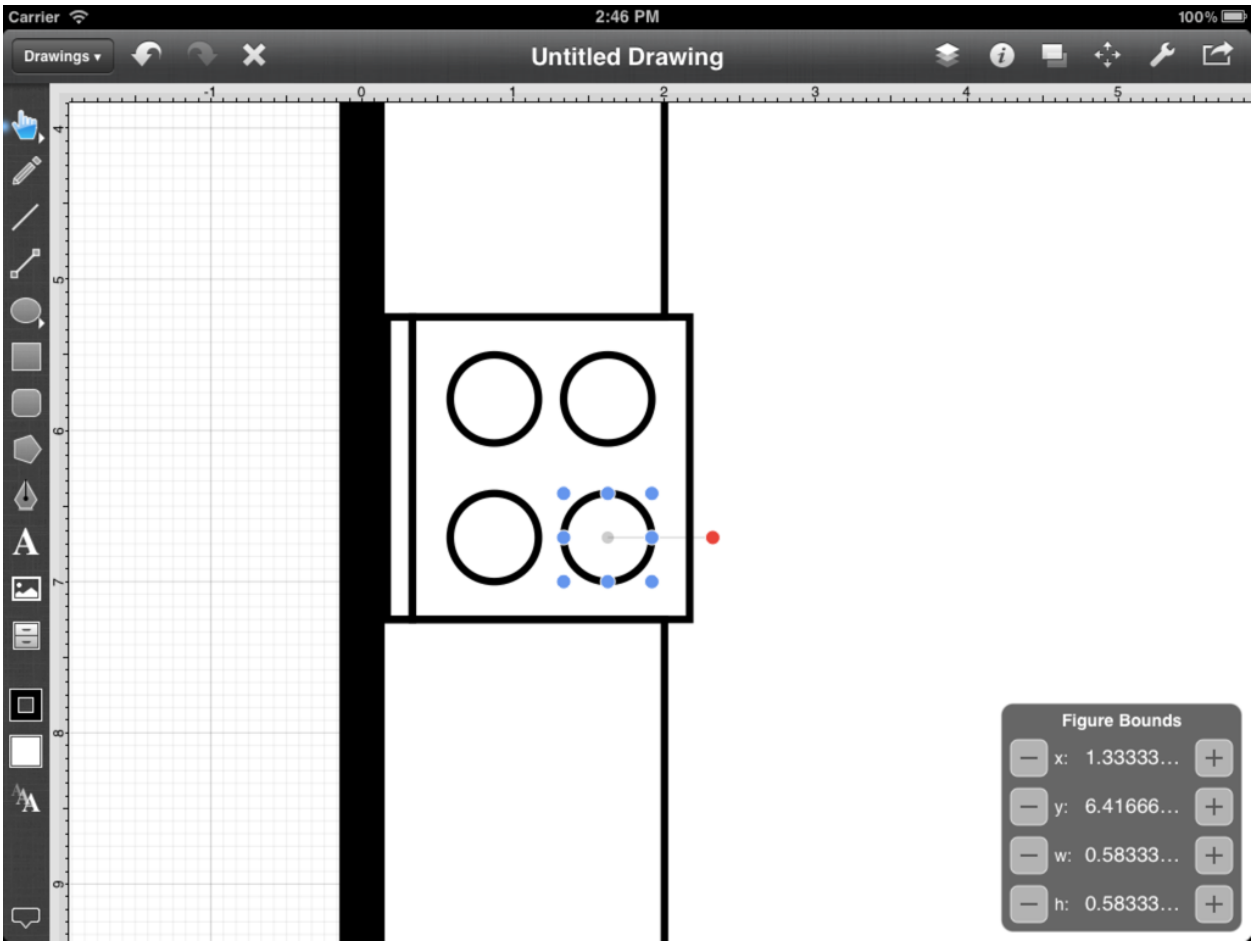
We'll start first with the stove/range. First, use the Rectangle Tool to draw the back panel of the stove/range.



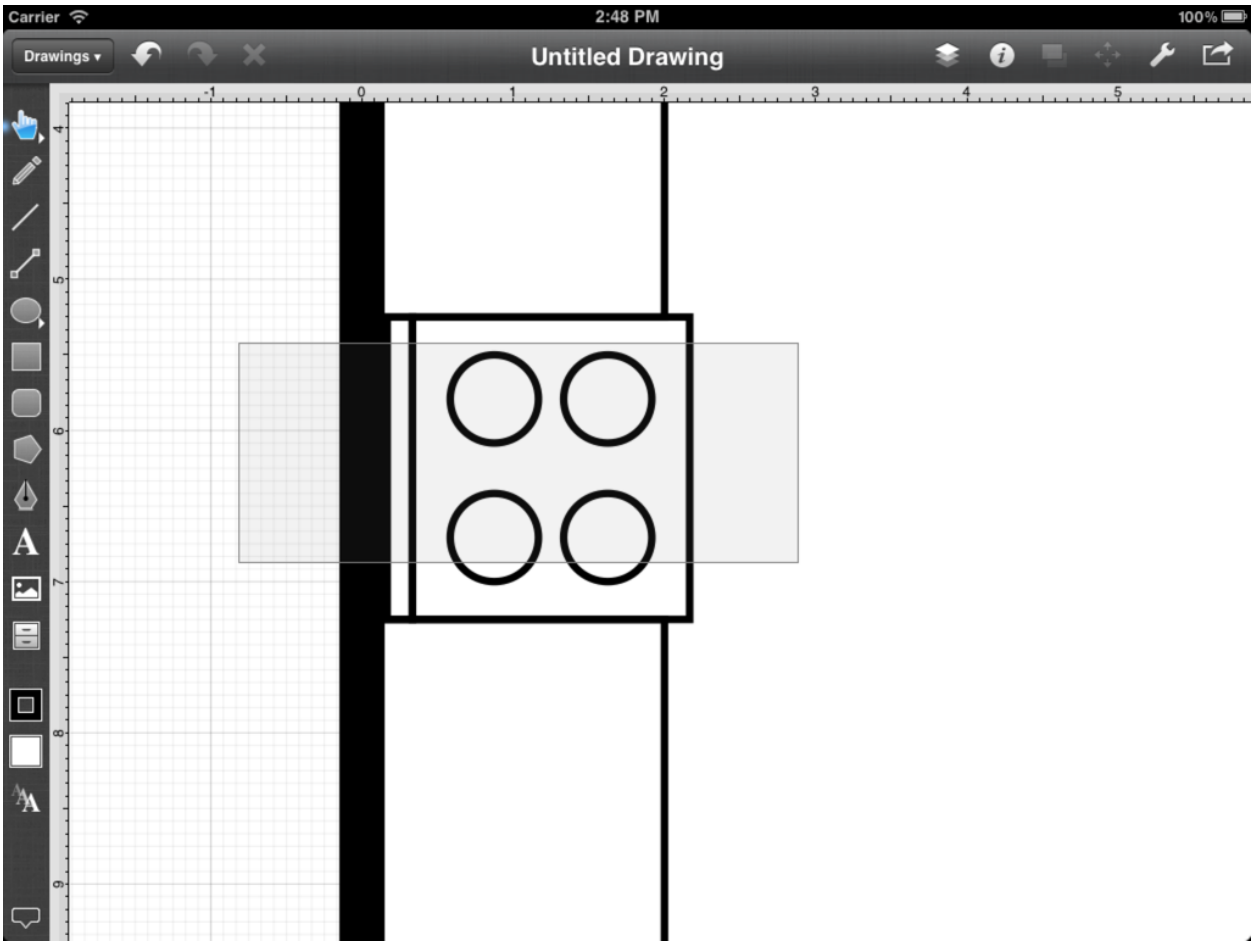
Next, draw the body of the stove/range.



Next, use the Oval Tool to create the burners on the range top.

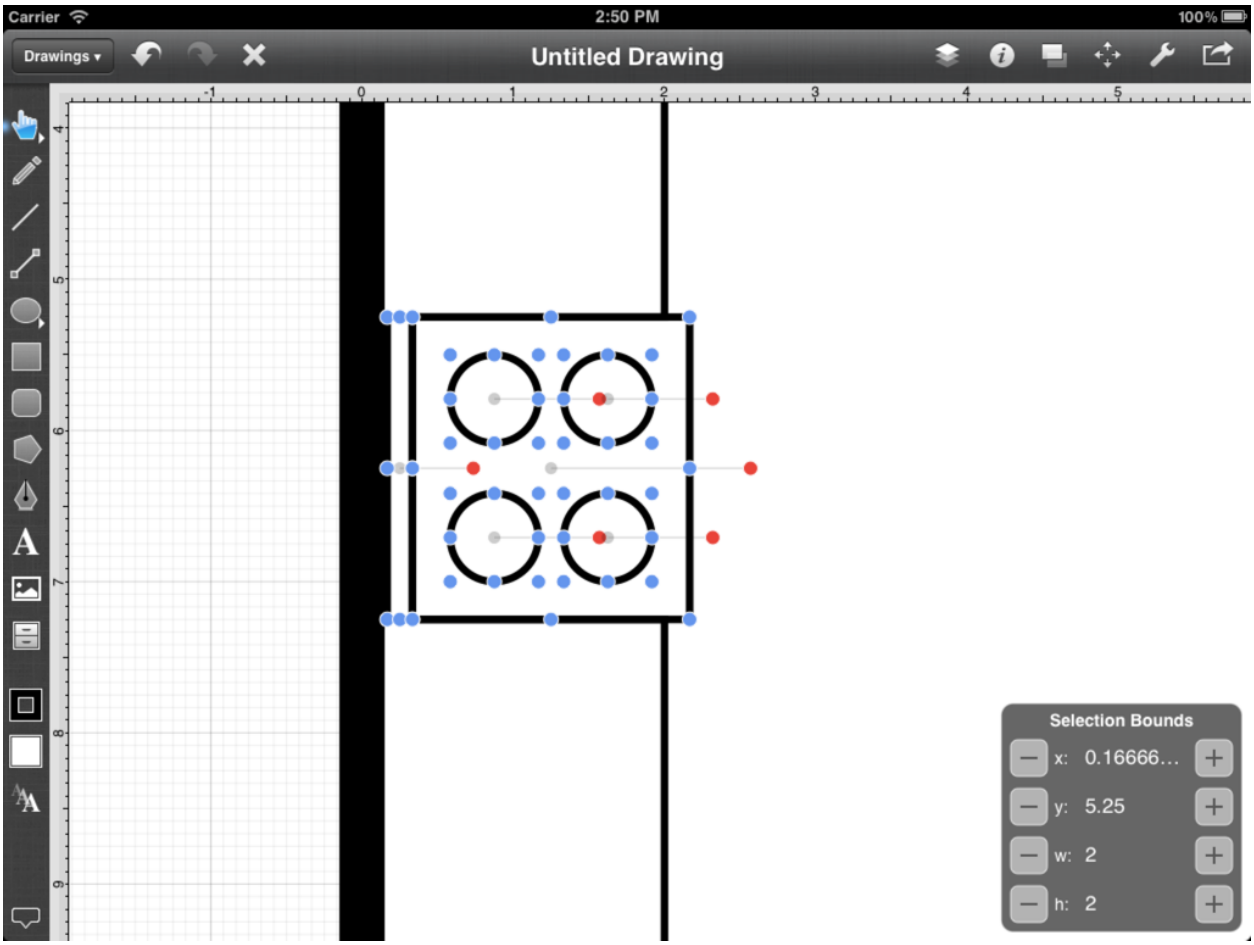


Lastly, group all of the objects so that the drawn stove/range can be manipulated as one object. To group the stove objects into a single object, draw a **Selection****Rectangle** around all of the shapes to make a selection.

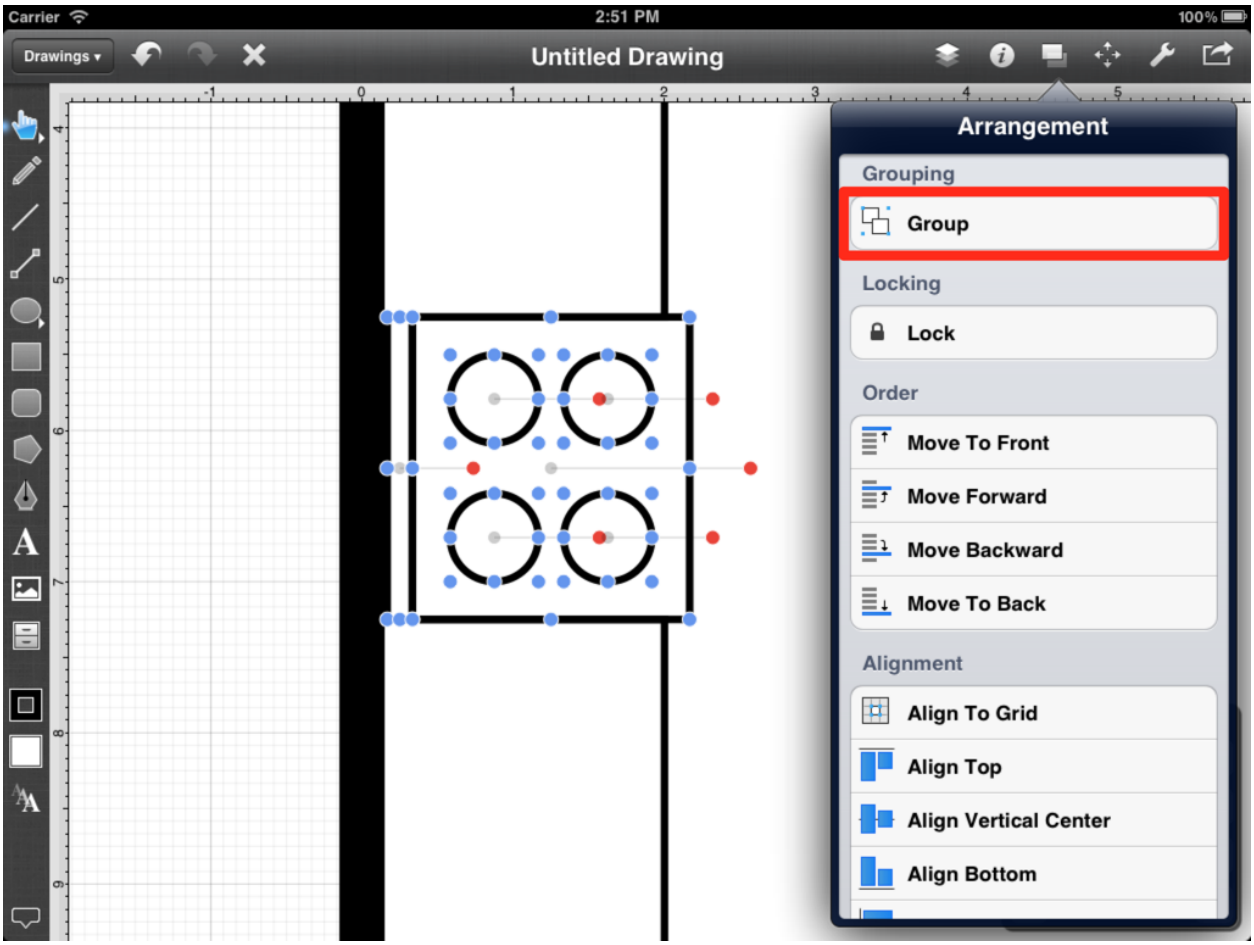


Note: Make certain the drawn selection rectangle is similar to one shown above so that it intersects only the shapes in the stove. Doing so will prevent the complication of inadvertently selecting one of the countertops and adding it to the group.

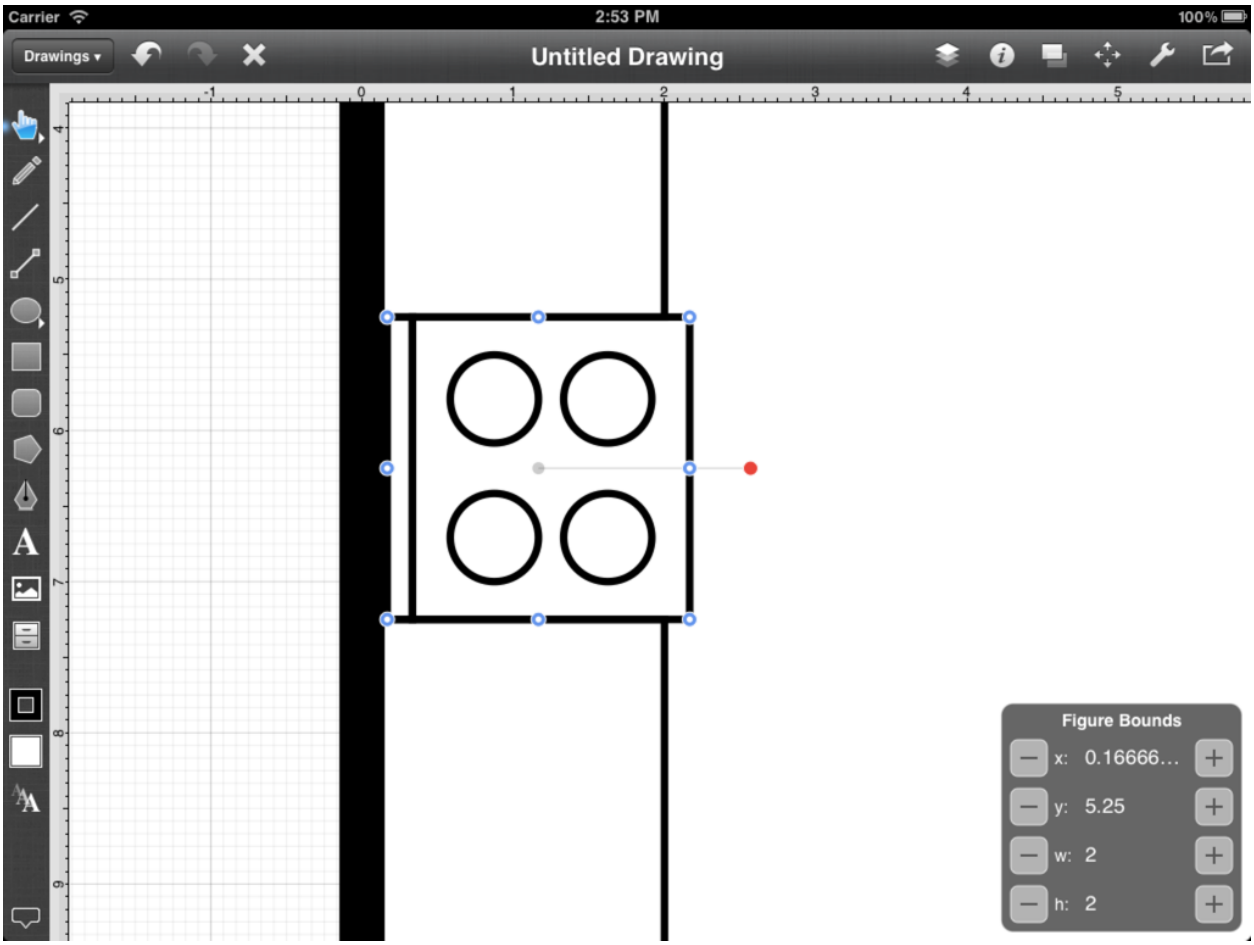
The range shapes will be selected after drawing the selection rectangle.



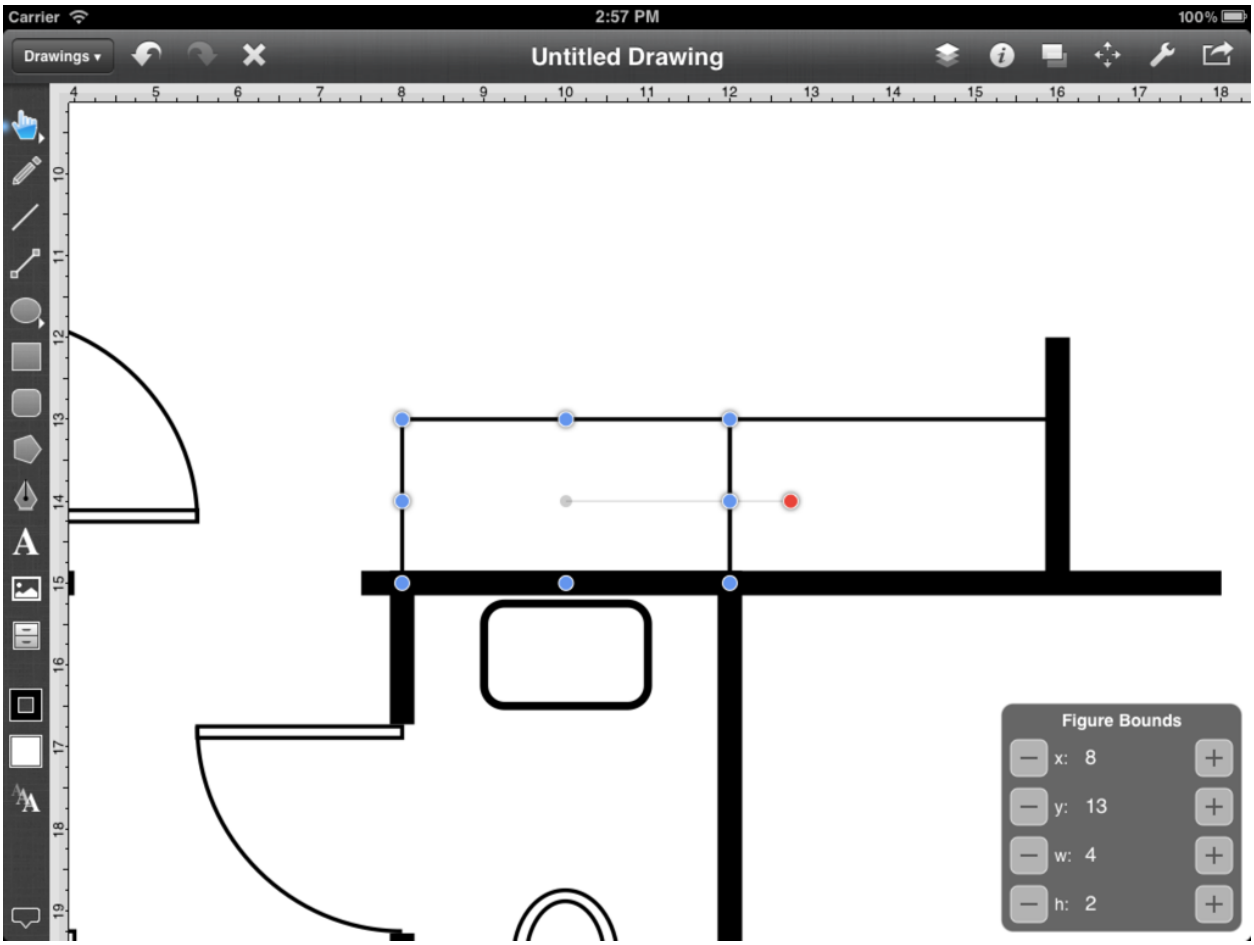
To group the shapes, go to the Arrangement Menu and select the **Group** option.



Once the figures have been grouped, only the handles for the grouped figure will be visible as opposed to the handles of each individual figure used to create the stove.

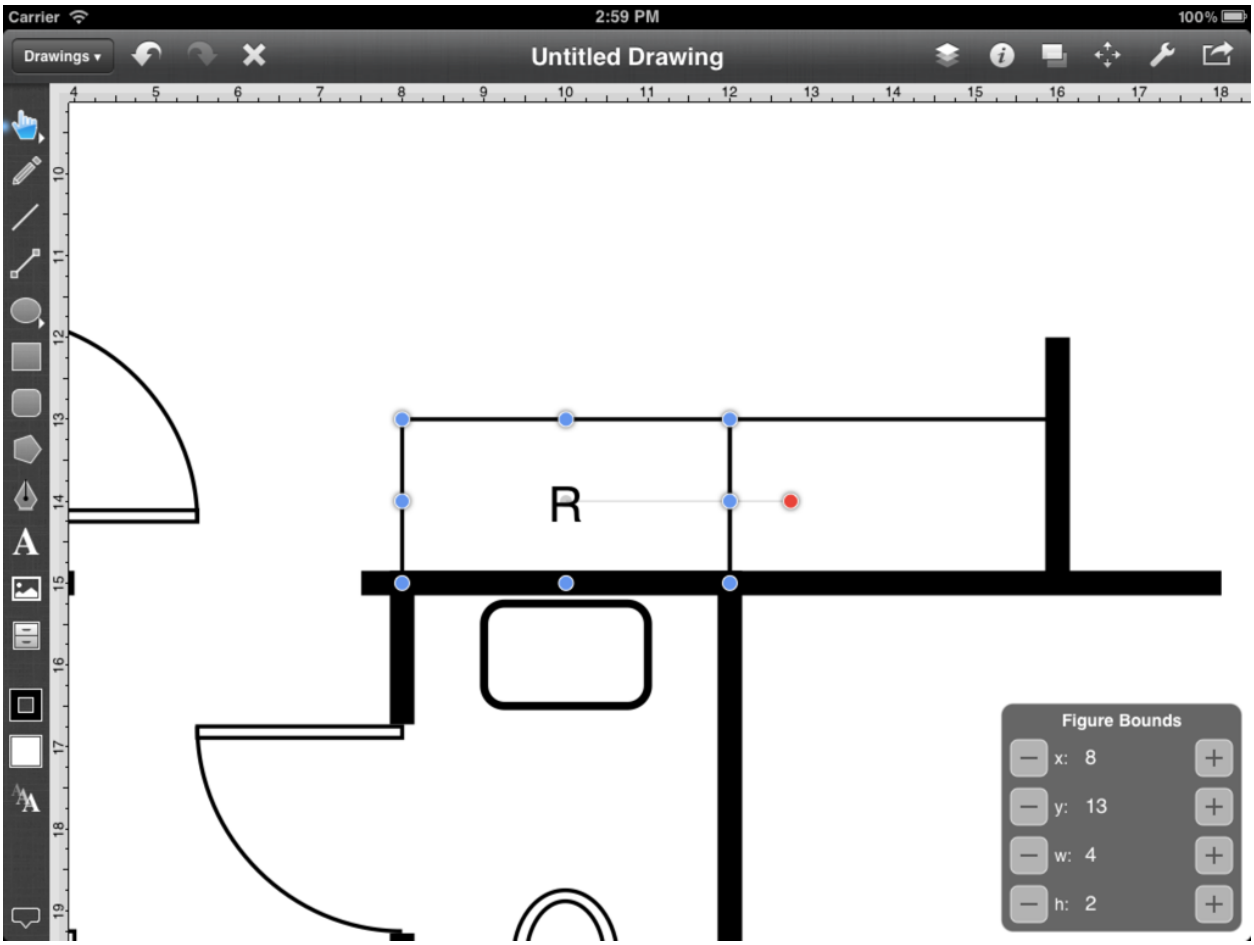


Next, add the refrigerator into the kitchen. Start by drawing the body of the refrigerator with the Rectangle Tool.

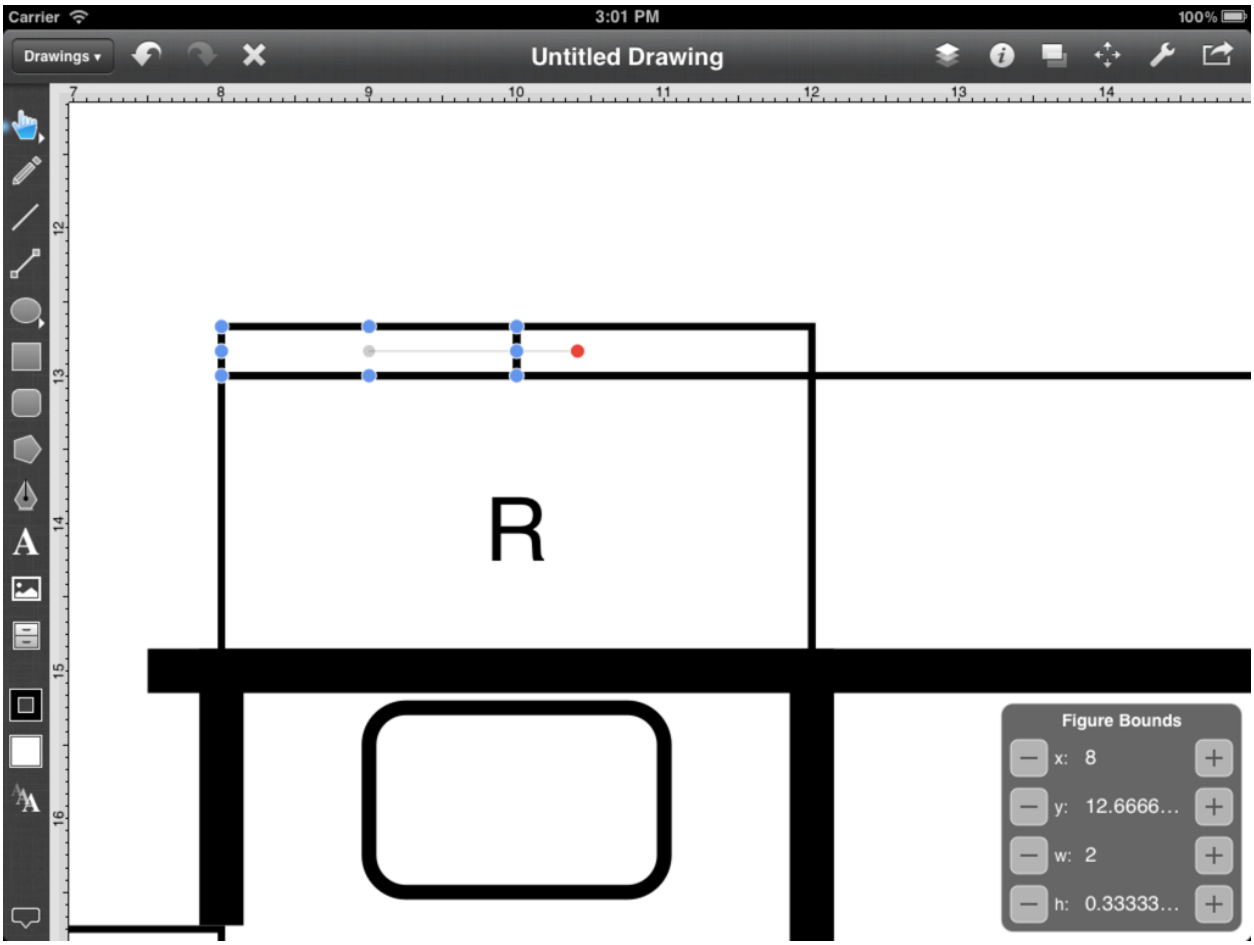


Next, insert an "R" into the drawn rectangle in order to make it more obvious that this object is a refrigerator. TouchDraw makes it easy to add text to any shape. Simply **Double Tap** on the rectangle to bring up the Text Editor.

Enter "R" into the **Text Editor** and either press on the blue **Done Button** or tap outside of the editor to dismiss it.

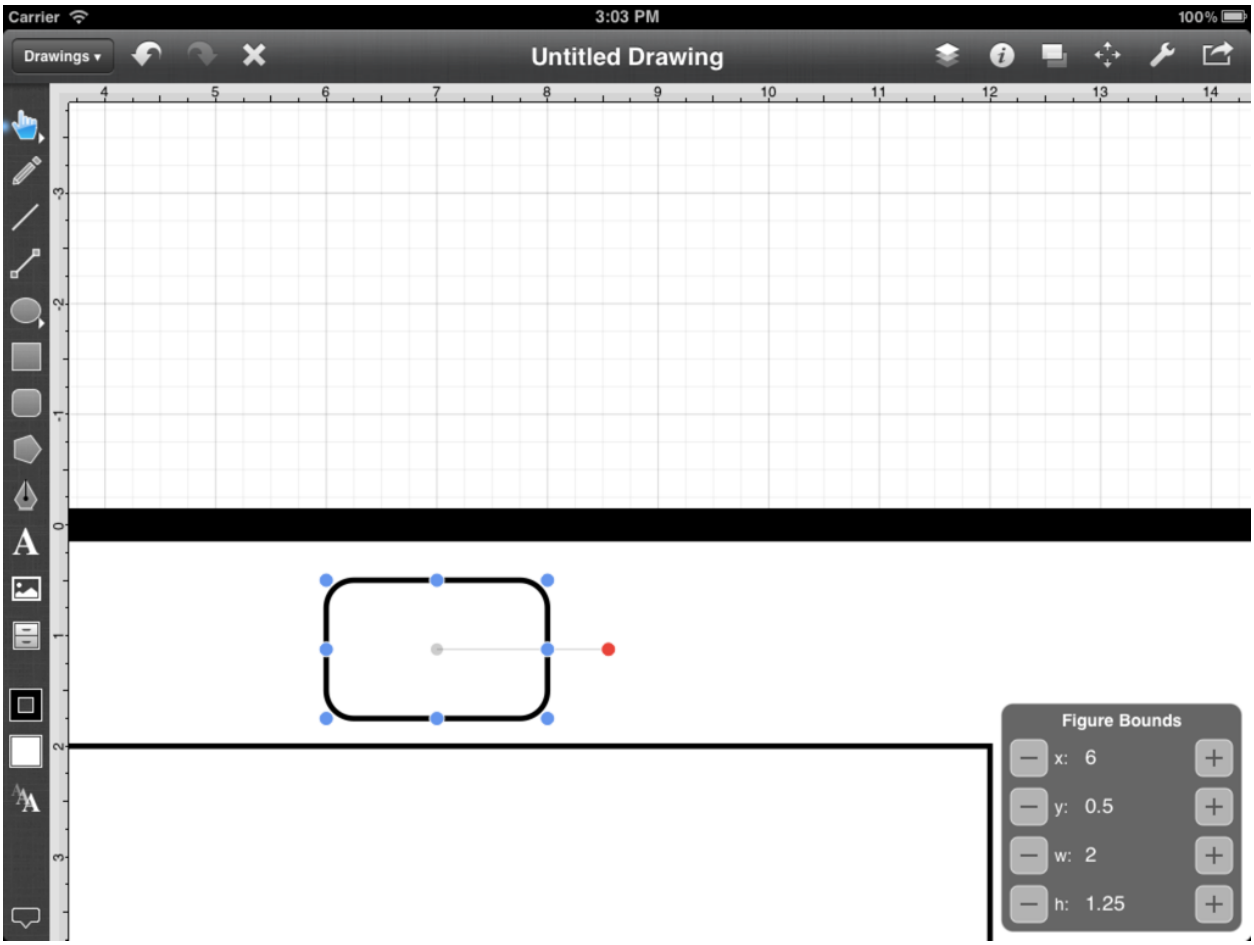


Next, draw the two "side by side" doors for this refrigerator. Use the **Rectangle Tool** as well to draw this portion of the refrigerator.

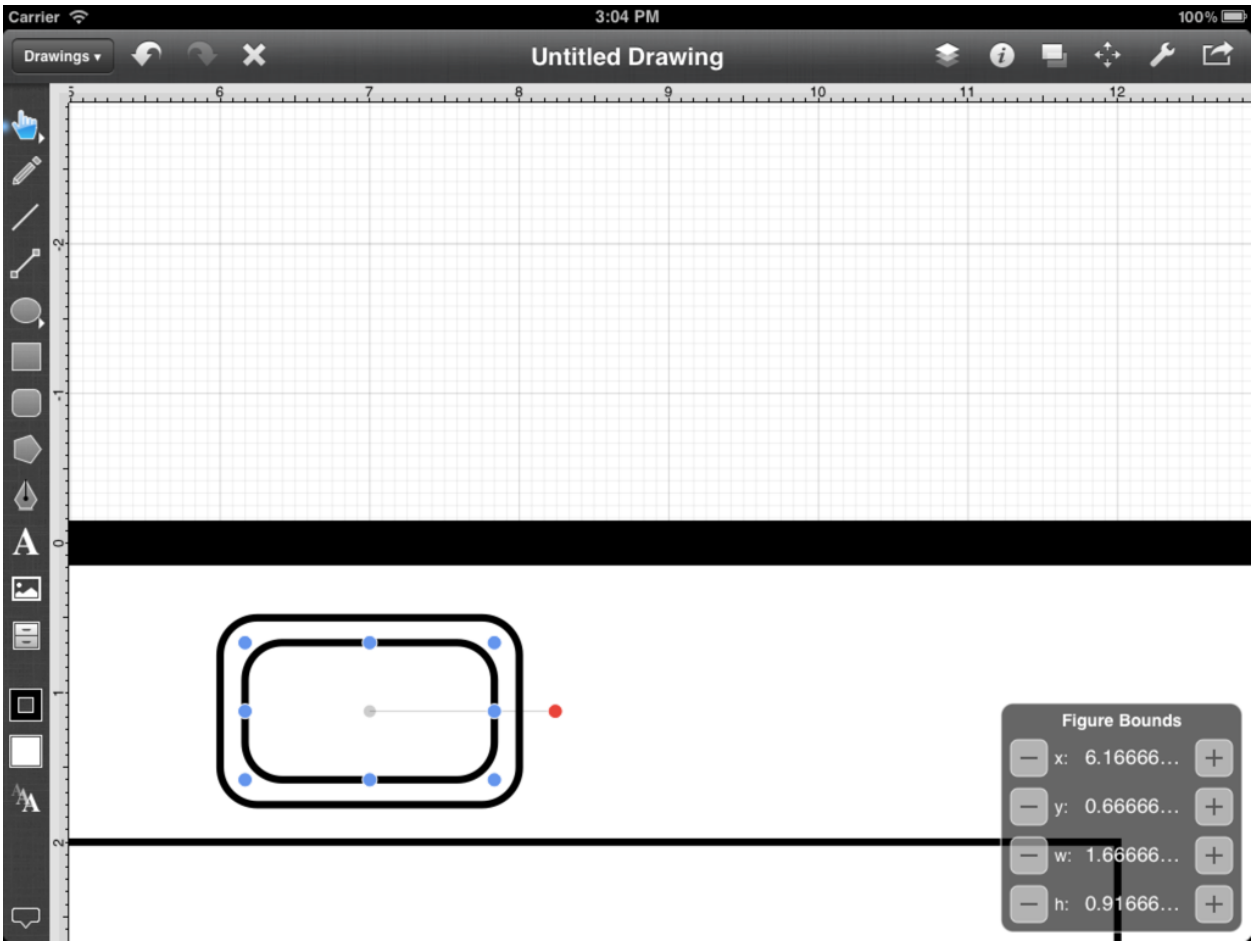


Lastly, add the kitchen sink in the countertop by drawing two rounded rectangles inside of one another.

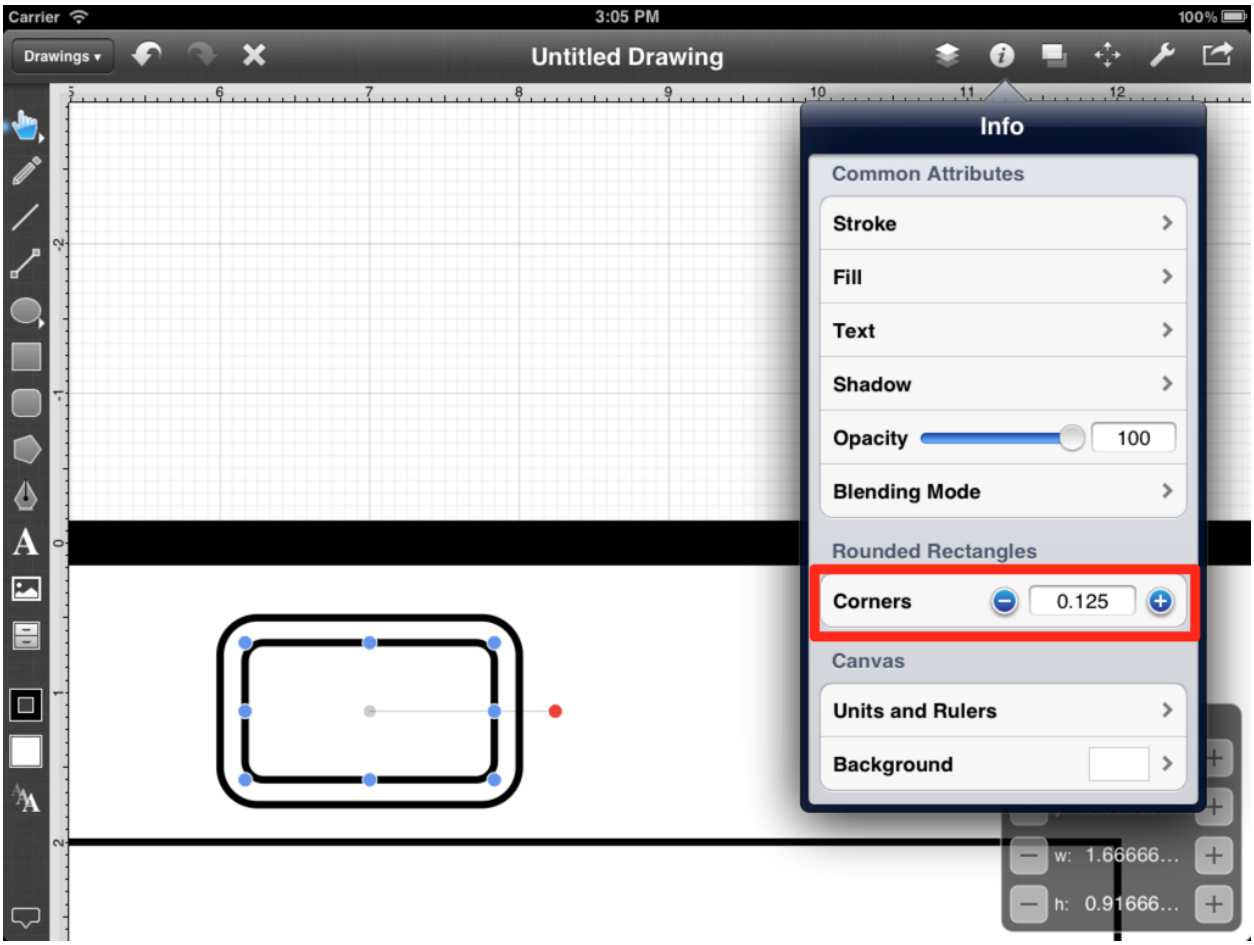
First, draw the outer rectangle.



Second, draw the inner rectangle.



Next, to make the two rounded rectangles look nicer next to one another, go to the Info Menu and edit the size of the **Corner Radius** of the inner rounded rectangle. The appropriate value in this specific tutorial is .125.



We've now completed the kitchen.

Continue to Next Step

24. Step 23 - Adding the Dimensions Layer

The next step is to create a new layer for adding the **Dimension Lines**.

As with previous steps where new layers were added, the same process must be followed to create a layer for the dimensions.

First, open the Layers Menu.

Second, lock the **Kitchen** layer since no additional changes will be made.

Third, press on the **Add Layer Button** to create a new layer.

Fourth, as before, press on the **Edit Button** and rename *Layer 9* to **Dimensions**.

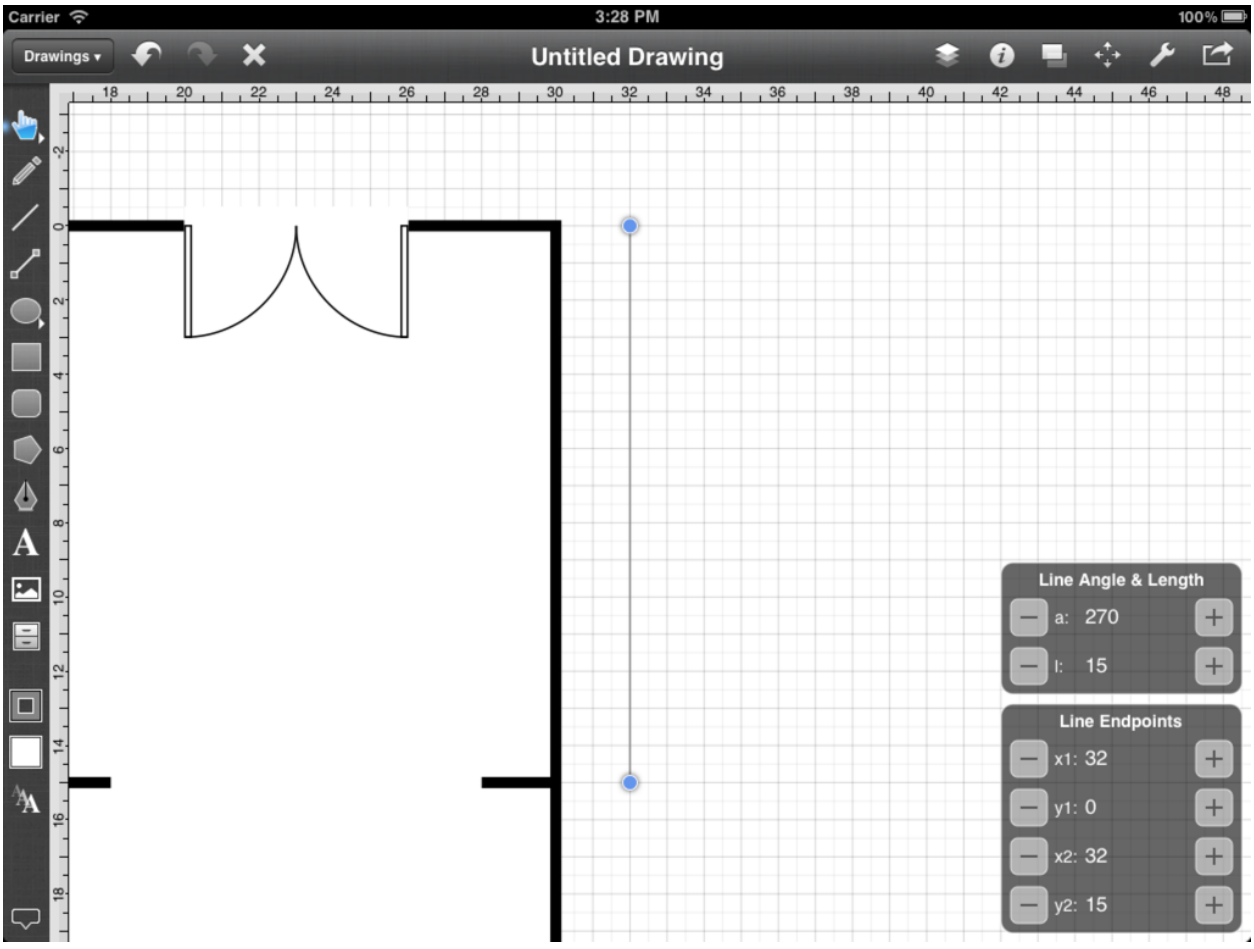
Lastly, make certain the **Dimensions** layer is selected and then dismiss the **Layers Menu** by tapping outside of it.

Continue to Next Step

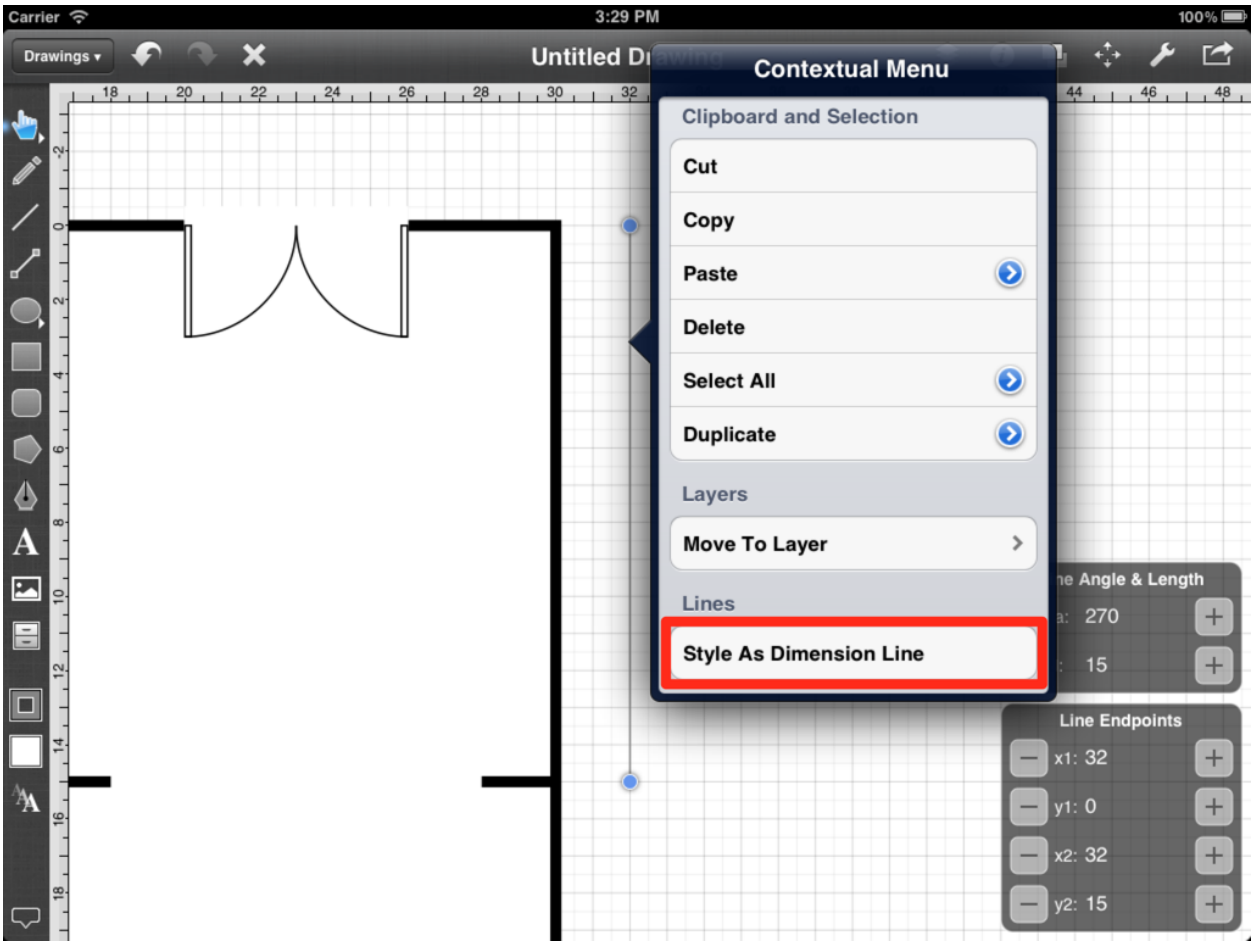
25. Step 24 - Adding the Dimension Lines

The next step in creating the floor plan drawing is to add some dimensions lines. TouchDraw makes it easy to create dimension lines in a drawing.

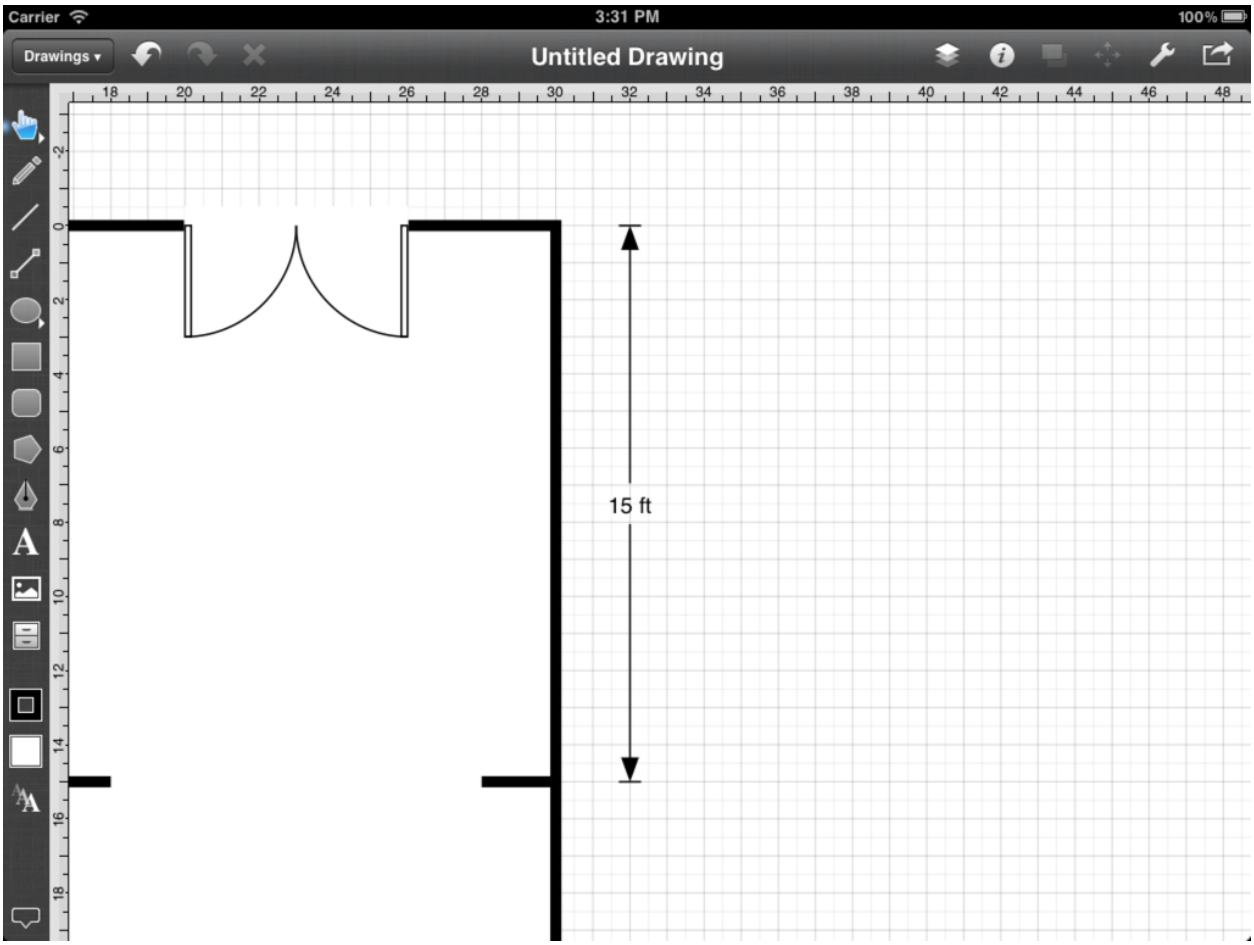
First, use the Line Tool to draw the line that will make up the dimension line. Start by drawing the dimension line for the vertical size of the dining room.



Next, **touch and hold** on the created line or press on the **Contextual Menu Button** in the lower left hand corner of the screen to bring up the Contextual Menu. The contextual menu includes an option called **Style as Dimension Line** when the currently selected shape is a line.



The line will be turned into a dimension line with an auto-filled length and arrowheads on each end when this option is selected.



Use the same process as above to create the additional dimension lines for the drawing. A few shortcuts are available for speeding up the creation of dimension lines. We've created the following video to demonstrate the steps outlined above as well as to show a quick method for drawing the rest of the dimension lines with a minimal amount of effort.

Continue to Next Step

26. Step 25 - Adding Room Names Layer

The next step is to create a new layer for adding the **Room Names**.

As with previous steps where new layers were added, the same process must be followed to create a layer for the room names.

First, open the Layers Menu.

Second, lock the **Dimensions** layer since no additional changes will need to be made.

Third, press on the **Add Layer Button** to create a new layer.

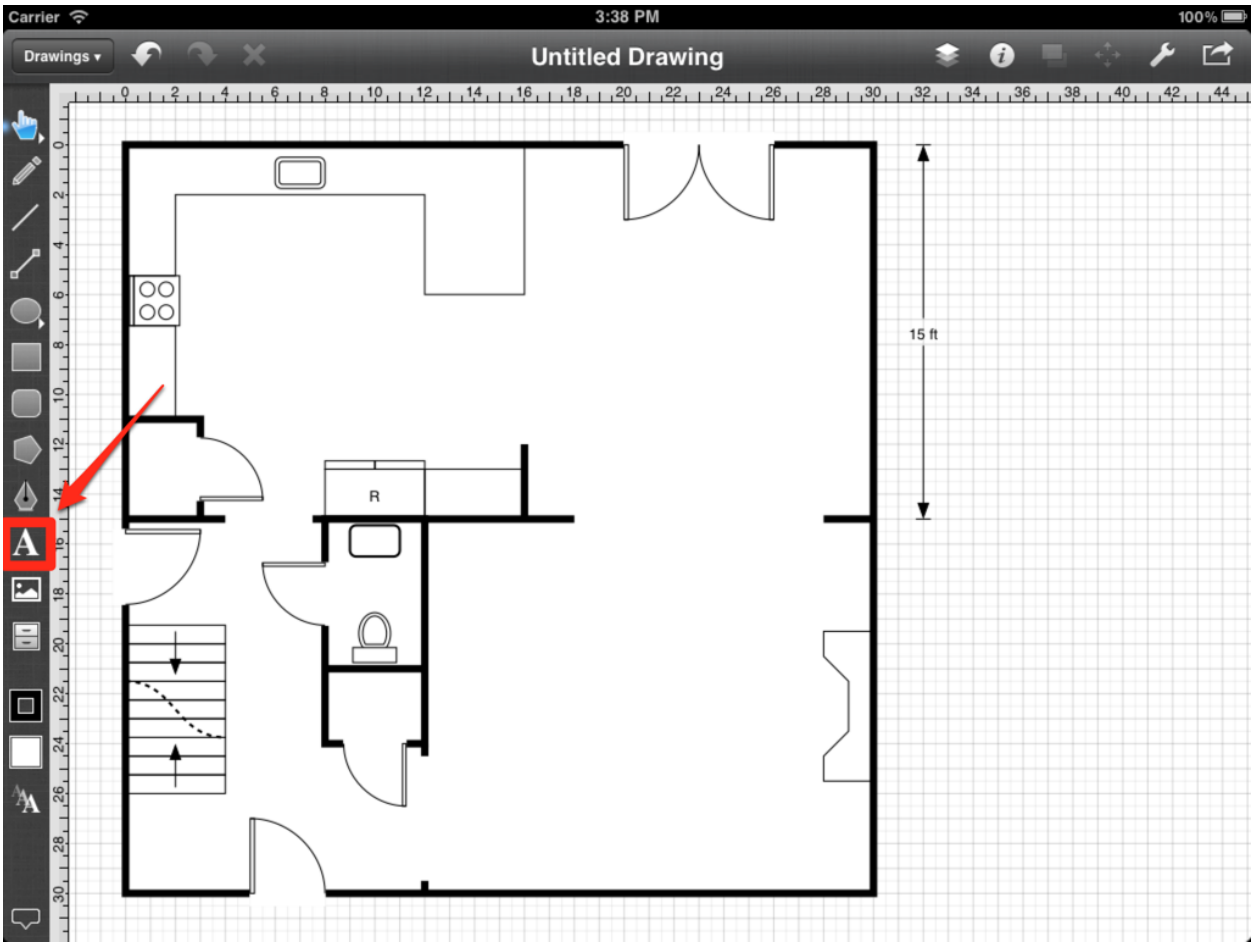
Fourth, as before, press on the **Edit Button** and rename *Layer 10* to **Room Names**.

Lastly, make certain the **Room Names** layer is selected and then dismiss the **Layers Menu** by tapping outside of it.

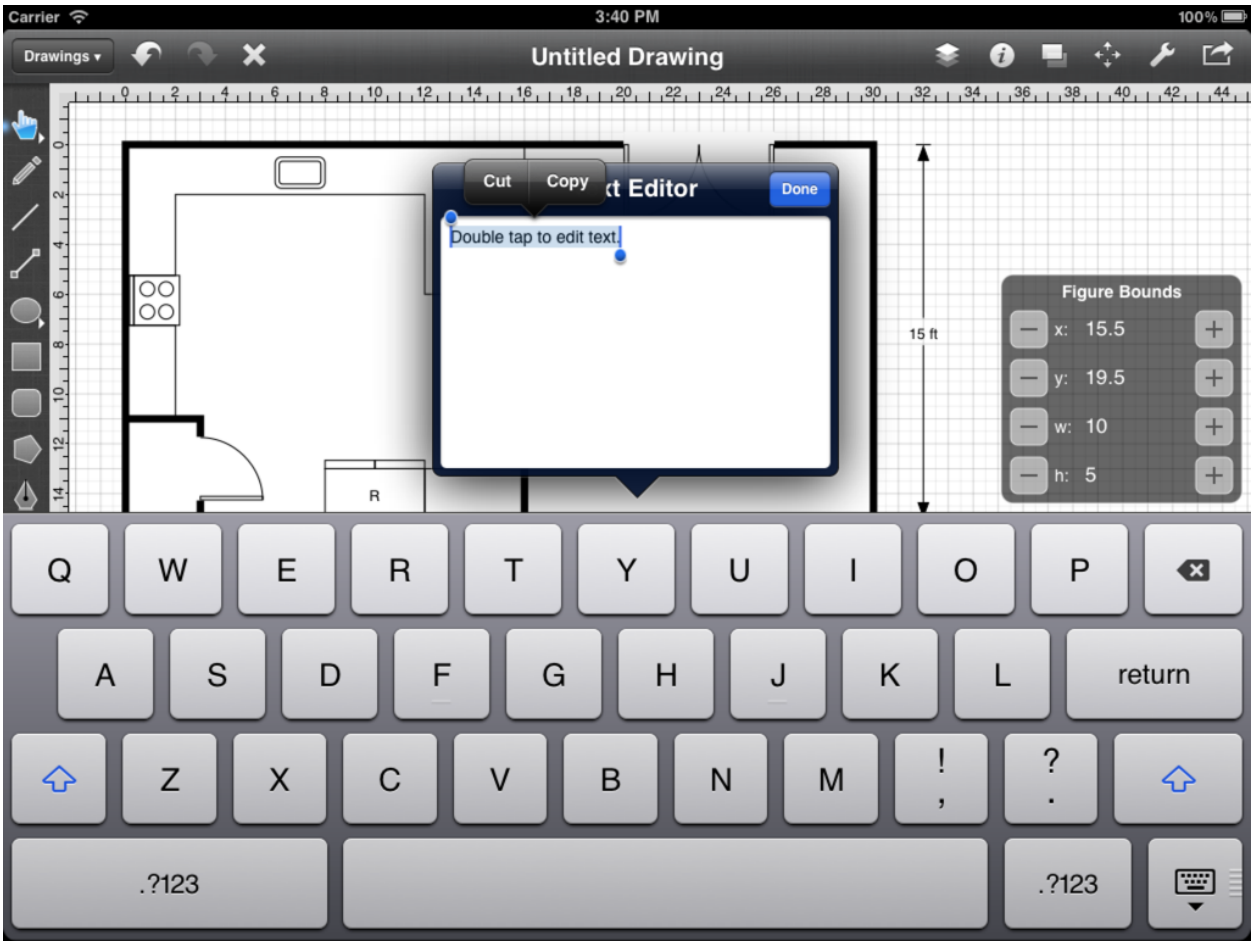
Continue to Next Step

27. Step 26 - Adding the Room Names

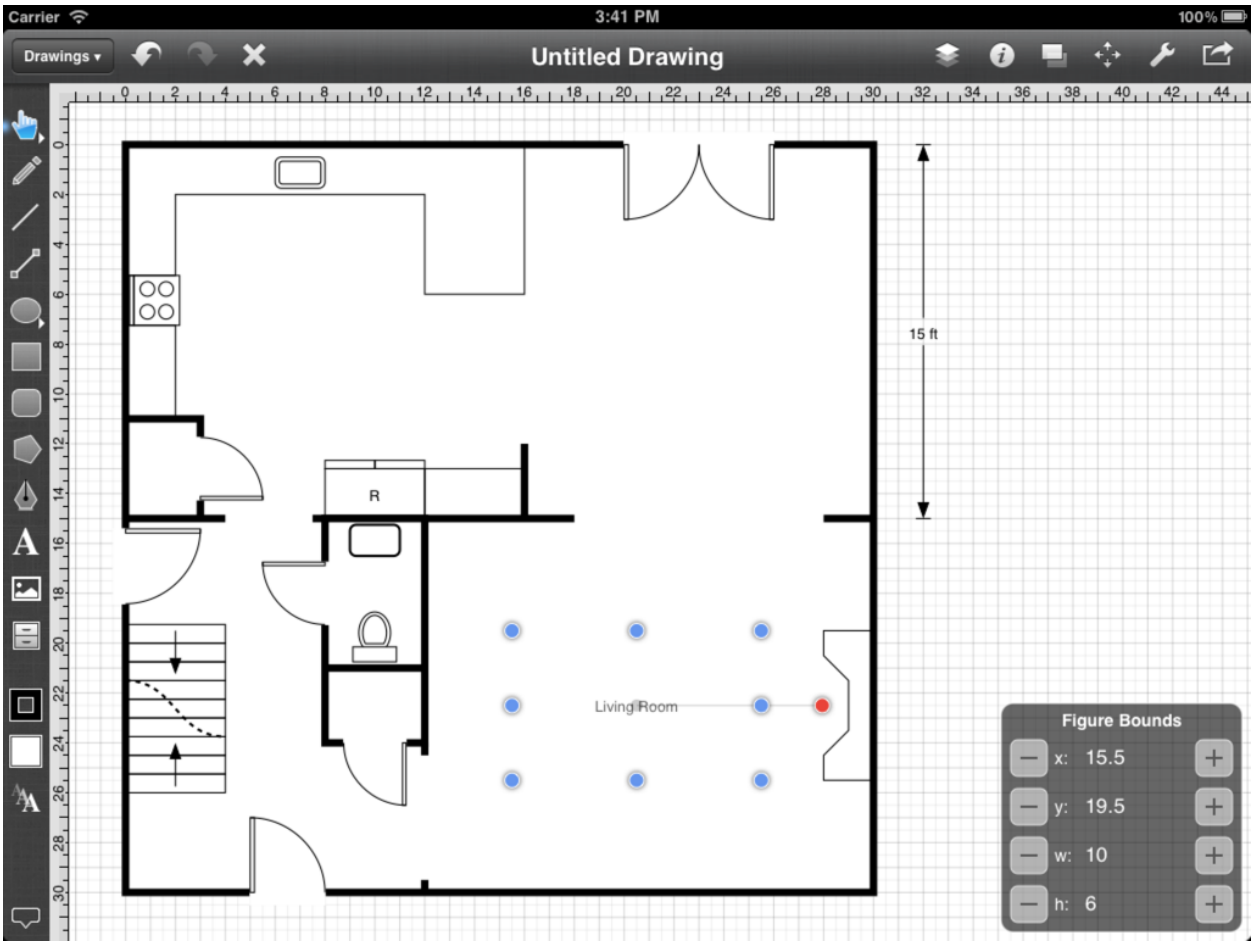
The final step in this tutorial is to add text areas for labeling the rooms with their appropriate names. Use the Text Tool to label each room.



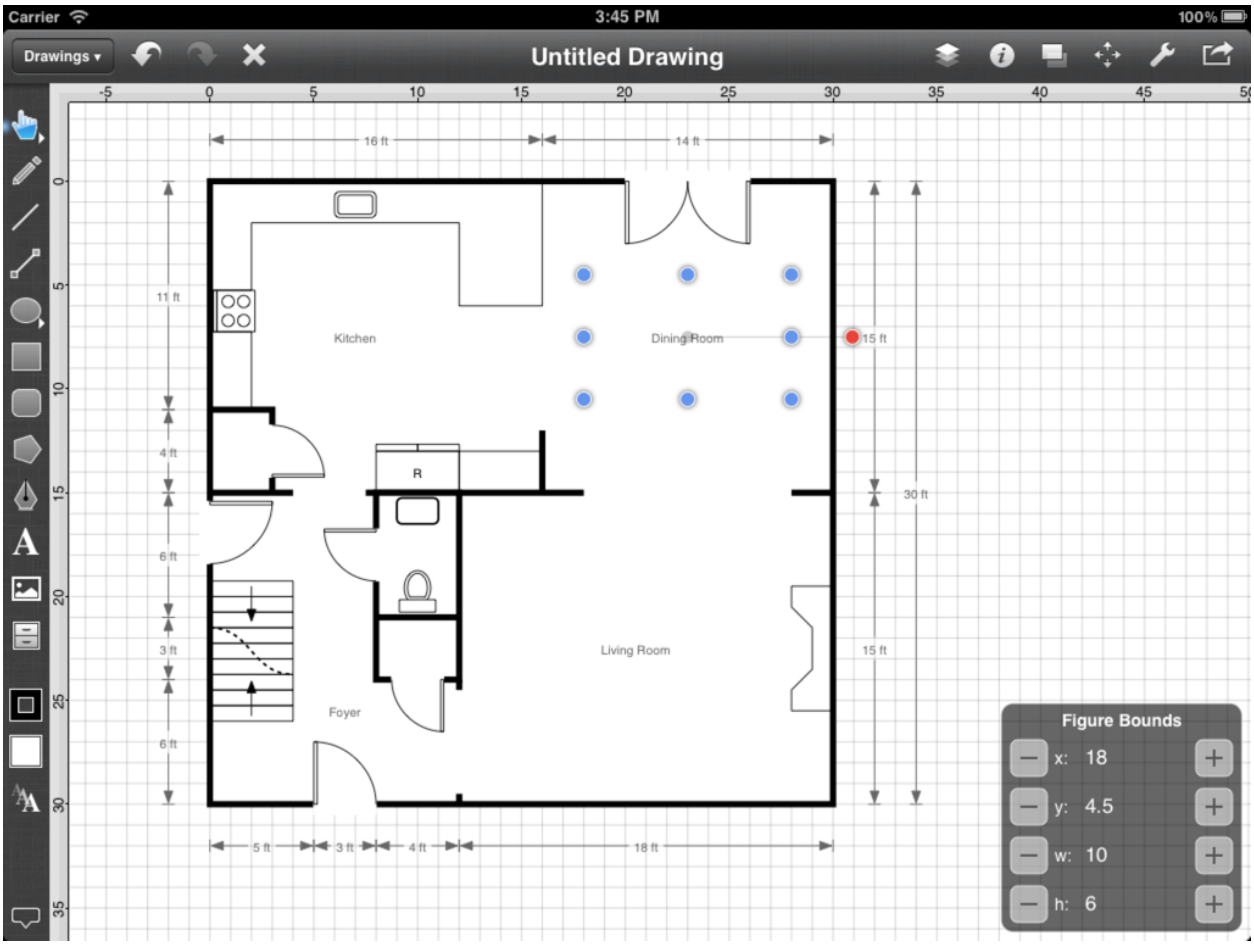
After selecting the **Text Tool**, tap in a location in the drawing to insert a text box. TouchDraw will insert a text box and immediately open the **Text Editor** for entry.



Enter the name of the room into the text box and press on the blue **Done Button**.



Repeat the process for the rest of the rooms (Dining Room, Kitchen and Foyer) in the floor plan.



And with that last step, we've completed our drawing.